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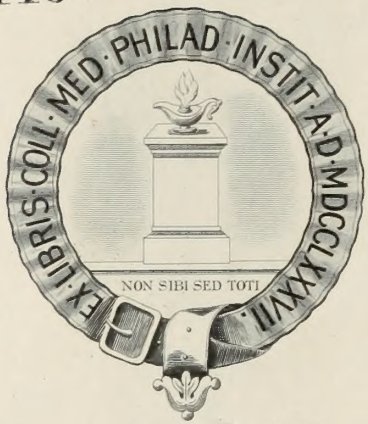

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BUFFALO MEDICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

My Experiences in War—a Contrast, 1885-1900.[1]

BY LIEUT.-COL. G. STERLING RYERSON, M. D., C. A. M. S., Toronto, Ont.
Knight of the Order of St. John of Jerusalem in England.

I WISH to say how much I appreciate the honor done me by your association in inviting me to be present and to take part in this most interesting meeting. I do not know of an occasion when medical officers whose experience covers so long a period of time from 1861 to 1902, and so wide a sphere of action, the Philippines, South Africa, Cuba and the war of the Rebellion, have been gathered together to compare notes and to deduce from the sum of their experiences something which may be for the public benefit. I am not one of those who believe that the time is at hand when there shall be no more war and that the best efforts of humanity will be devoted to the arts of peace. I am rather of the opinion of my late friend Surgeon General Hamilton, who thought that so long as man had a cerebellum he would fight.

Wars are more frequent and more bloody at the end of the 19th than in the 1st century. Education and religion have not eradicated nor even lessened man's love of war. Indeed, the conditions of the every-day struggle for existence, is of the nature of war. Thomas Jefferson said that the world needs a little blood letting every twenty years, and history shows that there has been a war of more or less magnitude at these intervals of time.

To the medical profession falls the honor of mitigating the horrors of war and of minimising the ills and suffering of those who fight for their country. Our work of mercy knows neither race, creed nor color. A broad humanity covers them all.

I have been asked to say something about the medical side

1. Read at the 27th annual meeting of the Alumni Association, Buffalo University Medical College, May 2, 1902.

of the war in South Africa, but I cannot do so to my own satisfaction without relating briefly some of my experiences in the Northwest rebellion in Canada in 1885, especially as the two campaigns present many interesting points of contrast and it will add another campaign to the records of today's discussions.

On the night of March 27, 1885, I was roused from a comfortable slumber by the ringing of my telephone. Imagine my surprise when the commanding officer of my regiment ordered me to parade at 8 a.m. next day with my ambulance corps, prepared to leave for the northwest, where a rebellion of half-breeds and Indians had broken out. The rest of the night was spent in preparation and in hunting up my men. Our departure was postponed two days to enable arrangements for transport, and the like, to be made. On the morning of the 30th we left Toronto for the front. On April 1 we reached Ricotasing, the then end of the Canadian Pacific Railway's tracks, on the north shore of Lake [Huron. A long gap of forty-two miles had now to be crossed in open sleighs during the night with a temperature of twenty degrees below zero. The snow was from four to five feet deep, the track through the forest narrow and any deviation from the beaten path meant an upset in the dark. After an all night drive, we arrived nearly perished with cold, at Camp Desolation. We camped in the snow at this place until April 3, without tents or cover save our blankets. One man went stark mad, removed all his clothing and would have leaped into the fire had he not been prevented. On this date we embarked in open flat cars running on rails laid on the snow, which gave a serpentine movement to the train.

We ran 150 miles in this way, arriving at Port Munro late in the evening. On Easter Sunday, April 5, we marched 20 miles across the ice to McKellar's bay, then again took "palace" flat cars for 12 miles to Jack Fish Bay, where the night was passed; next day we marched 22 miles to Winston, through snow and slush, then more "palace" cars to Nepigon, reaching there at 10 p.m. There still intervened 14 miles between the ends of the track. It was intensely dark, cold and raining. All around was the gloomy primeval forest; between us and comfort lay a stretch of ice covered to the depth of a foot or more with slush and water. Plunging, struggling along arm in arm, the regiment advanced. Hour after hour the weary struggle proceeded and day was breaking when the head of the column debouched on terra firma again. Exhausted, the men threw themselves on the

seats of cars and fell asleep instantly. The details of this march have never been published fully until now, and I think you will agree with me that it was a wonderful performance, especially when it is considered that the men were fresh from the counting house and shop and factory, without any preliminary training for the field.

You will ask what were the physical effects of such a trial of endurance? They were less serious than you might expect. Three men broke down by the revival of old rheumatic affections, one man lost his toes with frost-bite, one became acutely insane, but eventually recovered, one had orchitis secondary to gonorrhea, one accidental fracture of the ulna, one accidental gunshot wound of the thigh, a dozen or more snow blind from the terrible glare on the march across the ice in daylight. A small casualty bill considering the circumstances. The gunshot wound was interesting. A correspondent was showing his self-cocking revolver to an officer when it went off. The ball entered the thigh close to the outer side of the femoral artery, ran upward toward the abdomen for about five inches, when it abruptly turned backward and was lost in the loose tissue at the back of the thigh, where it still lies. I ascribe our successful march partly to the food, which consisted of fat pork, bread, butter and biscuits, enabling the men to withstand the cold. No rum ration was issued. Alcohol means death to men benumbed with cold.

My experience leads me to believe that total abstinence in active service under hardship is a factor for good,—in very hot and very cold climates at any rate. We traveled by train to Qu'Appelle station, 2,150 miles from Toronto, where our march of 250 miles across the prairie began. When the alkali plains were reached the men, who could not be prevented from drinking the water, suffered severely from diarrhea, which was controlled with difficulty.

On April 24 was fought the action at Fish Creek, my first experience of Indian fighting. The half-breeds and Indians were driven off with a loss on our side of 8 killed and 40 wounded. That night it rained, snowed and froze, so that the outposts and sentries had a hard time of it, though strange to say very few came into hospital as a result. My Northwest and South African experiences lead me to believe that Canadians are as hardy as army mules, and that they can kick quite as hard on occasions. The engagement at Batoche took place from May

9 to 12, at which our loss was 8 killed and 46 wounded. This brings me to a consideration of the wounds inflicted.

The weapons used by the enemy were Winchesters, Sniders and smooth bore guns with a few Sharpe rifles. The Winchester produces a small wound of entrance and a huge wound of exit. The Snider, a large entrance and a huge exit. When bone was hit it usually splintered and fractured in all directions: an exception was the case of a man who was shot through the condyles of the femur at short range. A clean hole was bored without apparent involvement of the joint or shaft of the bone. He made a good recovery. Where joints were entered there was extensive destruction of parts necessitating resection or amputation.

Joints into which fractures entered became permanently anchylosed. I observed that even slight wounds were slow of healing. A tough scar formed which separated very slowly,—a great contrast to the Mauser wounds. Of pyemia there was only one case, that of a man who refused to have his leg amputated for a penetrating wound of the knee-joint. The primary dressings were crude, the first aid packet not being in use at that time. Multiple wounds were unknown owing to the slow firing of those days compared with the present. Wounds of the brain were all fatal. One man carried a round two ounce ball in his head for a week when he suddenly died, probably from secondary hemorrhage. All who were shot through the abdomen died—contrast the penetrating wounds of this region by the Mauser bullet—as did also those suffering from penetrating wounds of the chest. Slugs and round balls bruise and lacerate, but if not at very close range run around bone.

A curious wound is produced by two round balls flattened on one side; there is one wound of entrance and two of exit, often very remote one from the other, so one is puzzled to know where is the other wound of entrance. Secondary hemorrhage is common, owing to the laceration and bruising of vessels which do not give way at once.

To continue my narrative, we advanced by boat or by trail until we reached Fort Pitt, whence expeditions were sent out in chase of Big Bear. With his capture ended this trying little war, fought entirely by Canadian Volunteer soldiers. It will give some idea of the vastness of that northern land when I say that when we turned toward home we had 3,500 miles to travel, and that we were ten days coming down the Saskatcha-

wan river by boat, traveling twenty hours a day, for there is little night in those northern latitudes in summer.

SOUTH AFRICA.

I come now to the second part of this paper, my experiences in South Africa. On the 21st of January, 1900, I embarked for South Africa, on the troop ship Laurentian, with "D" and "E" Batteries, Royal Canadian Artillery, and on the 29th day from sailing, landed at Capetown.

We landed in a cape "southeaster;" fine, sharp dust was blowing in all directions. It was intensely hot, temperature, 105° in the shade. Along the docks lay transports three deep. On shore, negroes, malays, Chinamen, Colonials, English Tommies, and Highlanders jostled and swore in their respective tongues. Horses, mules, oxen, steam traction engines added to the noise and confusion. Mountains of food and war-like stores encumbered the dock. Above, the sweet blue sky of South Africa, in the distance, the towering heights of Table Mountain with its table cloth of cloud. What a contrast to the silence, the gloom of the forest, and the bitter cold of the north shore of my former experience!

Three days later I left for the front in a comfortable saloon carriage,—another contrast. How curious a land is South Africa? A land so often described, but yet indescribable. A vast area of plain studded with natural fortresses, called kopjies; traversed by great chains of mountains and wide rivers, which today are dry and tomorrow are rushing torrents, which none may cross, a land without herbage or trees, yet of a fertile soil, needing only water to render it most prolific of vegetation, as may be seen about Capetown and in southern Cape Colony. Through the vast area meanders a little narrow guage railway, so narrow that horses cannot stand athwart the little cattle tracks, but must stand sideways or with twisted necks and endure the torment of a long confinement and the want of water and proper sidings for disembarking them. Is it any wonder that they suffered and died? The road runs slowly upward for a 1,000 miles until a level of 6,500 feet above the sea is reached. Great ravines and dry water courses intersect the country, which must be spanned with bridges, and these were blown up by the enemy as they retired before our forces. On this toy railway all supplies of food, munitions of war, men, guns, horses, mules,

forage, hospital equipment had to be carried for the army. The task was not an easy one.

After two days and nights of travel, I arrived at Orange River, then the immediate base of supplies for Lord Roberts's army. A few thousand men guarded the great stores of food and warlike supplies, but a large portion of the camp area was covered by a general hospital of 500 beds, under the command of Lt.-Col. Battersby, R.A.M.C. The patients were most comfortably disposed in galvanised iron huts, ingeniously constructed so as to be easily unscrewed and removed. Comfortable beds and bedding were provided, a fair number of female nurses were on duty and the much abused hospital orderly was much in evidence. The experience of this war has confirmed the experience of private life,—that men do not make good nurses. They have not the ready sympathy nor patient unselfish devotion to duty that women possess, and I believe that in the future the number of army nurses will be largely increased and men retained for the heavier work of lifting patients, and the like. The pay of the army nurse should be increased in the British service,—it is too ridiculously small. In Canada a nurse ranks as a lieutenant and has corresponding pay and authority over the men employed in the wards.

A few days later I pushed on to Modder River of sad memory, a shallow trench of muddy water bordered with bushes, a river which was a little later to play so large a rôle in the production of enteric fever. To the south, lay a plain as level as a billiard table with no more shelter for marksman than was afforded by a few crumbling ant heaps. Behind the river were kopjies of considerable height. A couple of miles away to the left arose the belting crags of Magersfontein. Here I first saw Mr. Johnnie Boer, as a prisoner of war. Tall, swarthy, rugged, unkempt, he is a typical frontiersman. I have seen many of his kind in the great West. I pushed on to Kimberley, where I arrived a week after the relief of the siege. It was surprising to notice how little damage had been done to the town by the bombardment. For weeks 100 pound shells fell in the place at regular intervals all day, yet little damage was done. Everyone I met had hairbreadth escapes to relate and pieces of shell to show, which might have killed them but did not. Food was scarce and the principal item of diet was soup of unknown composition. Of wheaten bread there was none, but a heavy black kind, made of rye flour and bran was abundant.

There were comparatively few sick in the town, but soon the sick and wounded began to arrive in large numbers from Paardeberg, where 1,000 came in one day. Under this pressure the drill hall, Masonic Temple, public schools and other buildings were converted into hospitals, and every effort was made to meet the requirements of the situation. The medical staff worked night and day, and as at Bloemfontein a few weeks later, did all that men could do and, as usual with our profession, got little thanks for it.

The cause of the epidemic is to be found in the consumption of the Modder River water, there being no other to be had, fouled by the enemy imprisoned at Paardeberg drift by Lord Roberts's army, and filled with the carcasses of dead men and animals. This led to the great epidemic at Bloemfontein, a month later. Owing to the pressure on the narrow guage railway, of which I have already spoken, it was impossible to get a full equipment of hospital supplies either to Kimberley or Bloemfontein.

I had now the opportunity of studying the wounds inflicted by the Mauser bullet, the Lee-Metford, and artillery fire. I cannot give you the latest statistics of the percentages of death from wounds, but it is very small as compared with former wars. Up to the end of 1900, 12,637 officers and men had been wounded, of these only 732 had died. Men shot through the chest had been on duty again in four weeks, men shot through the abdomen were at work in five weeks or less, in six weeks men shot through the knee joint were able to walk about without assistance. Nothing like it had ever been seen in war before. I attribute these results to the aseptic character of the bullet, its high velocity, to the prompt application of the first aid dressing and to the eminently efficient treatment which the wounded received at the hands of the medical officers. The Mauser bullet has justly been described as a merciful one. Its action, however, upon human tissues, depends upon the range at which it is fired. It has been noticed that when it is fired at short ranges, within 200 yards, it has an explosive action. The nickel case seems to expand and become detached, causing a severe lacerated and contused wound, which heals but slowly. If it strikes at this range it crushes and destroys it. At longer ranges it makes a clean drill hole in bone and if it strikes soft parts only, a very small wound is made, there being little difference between the wound on entry and that of exit, with but little bleeding, unless a large vessel is injured.

In the case of the soft nosed or dum-dum bullet the injury is severe, the wound of entry is small but that of exit is very large; great masses of tissue are torn off with much contusion. When it strikes bone, the bullet mushrooms and pulverises and disintegrates it. If the range is very long, 2,000 feet or more, the soft nose bullet mushrooms and causes an extensive wound notwithstanding the range. It has been alleged that explosive bullets were used by the Boers. I have never seen a case which would justify this statement, nor have I ever seen an explosive bullet, but I have seen Mauser cartridges, which were split at regular intervals, evidently in process of manufacture, and I have seen them with the tips filed off.

As to the so-called poison bullets they were simply green with verdigris, the action of the grease in which they are usually dipped to preserve them from damp. This would rub off in the barrel when fired. Besides Mausers, the Boers used thousands of Martini-Henry rifles, which, as you know, throws a heavy chronicle ball similar to the Snider. The wound produced is extensive. You will recollect my statements relative to the Snider.

I had the opportunity at Kimberley, Bloemfontein and elsewhere of examining considerable numbers of Boer wounded and of observing the action of the Lee-Metford bullet. It inflicts a wound very similar in character to that of the Mauser, though the bullet is somewhat heavier and larger. The effect of shellfire is interesting. To begin with the smallest, the "pom-pom." I have known a shell of this class to go right through a man's face from front to rear, leaving a large hole, without exploding. Generally when they strike bone they blow a man all to pieces. They very seldom hit directly, but a man may be filled with small fragments. The noise they make in exploding is terrifying to the most hardened soldier. Common shell fly into a number of fragments which tear and lacerate frightfully, generally necessitating amputation. Shrapnel shell, contain 100 round bullets, which spread out fan-shape when the projectle bursts, and are usually deadly when they strike, but I once saw a Boer shot through the stomach from side to side by one of these missiles without seeming to be much inconvenienced by it. Lydite has not been found as effective in land fighting as was expected. If the shells fall on soft ground they do not explode, when they hit a rock the concussion and explosion is terrific and destroys everthing within reach. The fumes

cause severe headache, which the Boers say is counteracted by a few drops of vinegar.

Compared with my experience in the Northwest campaign Mauser wounds are innocuous. For instance, I have known a man to be shot through the knee-joint and walk in four weeks. He rejoined his regiment and in the next action was shot through the same joint again, with the same result. Penetrating wounds of the chest, unless they opened a large vessel, generally were followed by recovery. The experience of penetrating wounds of the abdomen is that they are immediately fatal if a large vessel is wounded, but wounds of the viscera are almost harmless. They are best left alone as resections have not been followed by good results. I have observed that perforations of the stomach heal readily if the viscus happens to be empty at the time, and the soldier refrains from drinking water. After two or three months discomfort is often complained of, caused possibly by adhesions which have formed. It will be interesting to learn the ultimate result of these wounds. A case of perforating wound of the liver, which came under my notice had rather hard luck, the patient was brought about forty miles in an ambulance and when seen was in a state of collapse. He recovered from his wound and was taken down with enteric fever; from this also he recovered, when he was attacked with dysentery from which he succumbed.

Wounds of the brain and its membranes are, of course, generally fatal, but I saw one recovery from very extensive destruction of the calvarium with contusion of the brain, followed by sloughing. He developed epileptic symptoms. I have heard of lodged Mauser bullets in the brain with recovery, but I have not seen a case. I have, however, seen an extensive laceration of the frontal lobe with loss of the eye make a good recovery, and I have seen both eyes shot out by a bullet passing transversely behind, and one in which the optic nerves were divided without much injury to the eyeballs.

I have thus far related some of my surgical experiences which form the dramatic side of war. Let me now say a few words about the medical aspect, which after all is the more important, for statistics prove that in war while 5 per cent. die from wounds or are killed forthwith, 15 per cent. die of disease, and the South African war is no exception to the rule.

Enteric or typhoid fever is the great scourge of armies in temperate climates to which in hot ones dysentery and cholera

are added. I heard of no case of cholera in South Africa, but in East Indian campaigns it is a prominent feature. It is a sort of "bull" to say that prevention is the great remedy, yet it is so. The sanitation of armies leaves much to be desired. Every army should have a chief sanitary officer with a large staff under him who should have full power to act peremptorialy. It is generally a quartermaster's work, a layman who knows nothing or next to nothing of his duties, or does not attend to them at all and men die like flies. Contaminated water was largely responsible for the epidemics in South Africa, but a large factor was the exposure of food for the troops to the action of myriads of flies which probably came straight from a feast on the saliva of enterics. The latrines were open and alive with flies. Urine passed on the sand dried and was blown hither and thither. The same can be said of solid excreta. Rigid sanitary arrangements would save thousands of lives in war as in peace.

In conclusion, allow me to say a few words about the use and abuse of the Red Cross. Under present conditions with long range arms of precision, the arm band worn by the individual is useless. It cannot be seen. At long range ambulances with their white covers cannot be distinguished from transport or amunition wagons. The cross on the white field is so small it cannot be discerned. The Boers made crosses the whole size of the wagon, which was better. Colonel Neilson, D.G.M.S., Canadian Army, makes a suggestion which I think is a good one—namely, that all connected with the medical service on the field of battle should wear red and that the tilts of the ambulance wagons should be painted red. All nations now have a field service dress according to the climate in which war is being carried on. The British red coat and the American blue will never be seen again on active service. Is it not a good idea to make the life-saving service as conspicuous as possible and thus avoid the regretable "Red Cross incidents" which are a constant source of contention?

I cannot too warmly state my appreciation of the honor you have done me in asking me to be present today and I wish the University of Buffalo God speed on her mission,—enlightenment and progress.

60 College Street.

Gunshot Wounds—Experiences in Civil Life.[1]

By WILLIAM C. PHELPS, M. D., Buffalo, N.Y.

WHEN I thought of writing something of my experience in the care of gunshot wounds in civil life, I looked over a rather exhaustive article on this subject and found records of such wounds by the hundreds of thousands, but all occurred in wars, and there was not a word concerning gunshot wounds in civil life. Because of the small proportion of gunshot wounds as compared to others which we are called upon to treat in hospitals and private practice, I find myself in something of the same dilemma as was the boy who was to write a composition on the "Snakes of Ireland" and began with the statement that there were no snakes in Ireland. There are, however, a limited number of wounds from firearms in this locality every year, but they are made by what military surgeons call small arms, rifles and pistols, and an arm that belongs solely to civil life—the shotgun. The pistol and shotgun have caused every such wound that I have had experience with, excepting on a few occasions when the patients have been members of the National Guard or veterans of our late wars. The shotgun is capable of making (and at a close range does make) wounds attended by great mutilation and mortality. I have seen hands entirely shot away and also all the anterior wall of the axilla destroyed. While I have never seen the immediate results of a wound by a fragment of shell in warfare, I think that the shotgun causes similar mutilation.

The pistol wounds have generally been made by a small ball of .22 caliber. I have, however, noticed in recent years that the missile has been of larger size, and by inquiry from officials who carry arms and of others, I have learned that the use of the .22 caliber pistol is more restricted, and that the .38 caliber is the usual weapon now carried. This is to be regretted. The armies of the world have adopted the small bullet of high velocity not because wounds made by it are more fatal, for it is well known that they are not and mutilate the soldier much less than the slow going large bullet of the Springfield rifle type. The object sought to be gained is to put the soldier hit out of action and not to kill him. The same object is accomplished with a small .22 caliber ball in civil life with a minimum of danger of fatal result.

1. Read at the 27th annual meeting of the Alumni Association, Buffalo University Medical College, May 2, 1902.

Police and other officers of the law should not be allowed to carry them, for the only object in their use is to put the person offended in a condition in which he can be captured and not to execute him at the will of the officer without trial as to his guilt or innocence. The manufacture of pistols of large caliber should be prohibited by law.

The majority of pistol wounds we treat are the result of accident or suicide, and in either case it is evident that the less dangerous the wound the better it is for the public at large. In the treatment of gunshot wounds military surgeons claim that surgeons in civil life have a great advantage over them, and should, therefore, obtain better results. The claim is made on the supposition that the surroundings of the average patient are more favorable than those of the soldier on the field of battle. In the very first period of time after the shooting, this may be true in many cases, because of the length of time which may elapse before surgical attention is received, but when that period has passed, I think that the advantage is with the soldier in an army with a medical corps organised and equipped according to present regulations. He is taught the use of aseptic dressing; the ambulance corps arrives with the same knowledge and he is delivered to the operating surgeon with a wound uncontaminated. In civil practice exactly the opposite conditions exist. In the majority of cases we start with an inoculated wound made so by officious but well meaning friends. We always find some dressing applied and its chief constituent is a handkerchief or some equally filthy article of apparel.

During the greater part of my past experience in the practice of accidental surgery no case of gunshot wound has been allowed to get very far away from the locality where it was received without a probe is made, to follow as accurately as possible the track which the missile made for itself through the tissues.

The masters of our profession taught that this is the essential thing to do and that it be done at once. We all followed their instructions and did our best to inoculate the wound, using the same methods that the bacteriologist now uses to inoculate his culture tubes and often with the most deadly pathogenic bacteria, for our probes were never sterilised.

Dr. Oliver Wendell Holmes wrote a beautiful poem in which he likened the medical profession to a light-house tower which for twice a thousand years had withstood all the attacks which its enemies had directed against it. But, if any of them had known

of the terrible effects of its teaching concerning the use of the septic probe in gunshot wounds, they would have had a means of attack of the most formidable character; but thanks to our textbooks and journals the knowledge of this error has been spread broadcast through the ranks of our craft and one now sees but little use of the probe, and then only under proper conditions. These conditions are that the patient should be prepared for operation if one is thought necessary, and the probe is to be considered as simply one of the sterilised instruments required.

Of wounds treated in the late civil war 10.77 per cent. were of the head, face and neck; 18.37 of the trunk; 37.70 of the upper extremities and 35.15 of the lower extremities. In civil life I think that the percentage for head, face and neck and upper extremities is much greater than the above given. Wounds of the head are very frequent and they may be of trifling consequence or most serious. Some treated were only scalp wounds which healed by adhesion or if the outer table was injured a granulating wound follows.

When the pistol was of large caliber and fired at a right angle to the contour of the skull more or less penetration occurred. Some of them extended only through the outer table, and if kept aseptic heal kindly. If, however, pus formed, septic meningitis and death were apt to result. When complete perforation took place and the bullet lodged in the brain, death uniformly followed, though in one case some years previously the patient was shot on the left side of the head posterior to and above the ear. The bullet penetrated the brain for about one inch and was removed. The wound healed and remained so about eight years. He entered the General Hospital complaining of pains over the cicatrix with fever, chills and delirium. An exploratory incision was made and a large pus cavity was found. This was cleaned and drained, but coma and death followed in about three days. Neither the operation nor a post-mortem examination determined the case of the abscess after the great length of time since the receipt of the wound.

In another case of penetrating wound with lodgment of bullet in the brain, I was able to locate it and remove it.

A suicide shot himself in the forehead to the left of the median line. He was kept at home for some ten days and until symptoms of severe brain trouble developed, when he entered the General Hospital. The wound was septic. With a Girvin's telephone probe, which Dr. Park kindly loaned, the ball was

located one inch from the back of the skull, having gone nearly through the brain in a direct line. A trephine opening was made posteriorly over its location and the brain substance penetrated by forceps when it was grasped and removed. Thorough drainage was established, but the cerebritis continued and ended in death.

I found the Girvin probe of great value in locating the bullet. It was impossible by any other probe to do so, because the processes of the dura mater projected into its tract and gave to the ordinary probe the sensation of a foreign body. As the rule laid down in the books is that bullets or other foreign bodies lodged in the brain substance should be removed when possible, this probe is of great assistance in making certain their location.

Wounds on the neck and face have done well by the usual dressing and no interference by way of operating unless a large vessel nerve was injured. I believe this is the best treatment, and I have been much surprised at the rapidity with which they have closed. When a pistol ball enters a joint there is so little outward appearance of injury that one is tempted to wait and take the chances on the result. I have had occasion to regret following this inclination. A strong, healthy man received a .22 caliber bullet at the lower end of the patella, which penetrated the joint. The wound was so small that the patient considered it a trivial matter. He, however, consented to hospital treatment. Synovitis followed with formation of pus and septicemia. The joint was exsected, but too late to save his life.

I shall in future treat gunshot wounds of the joints in the same manner that wounds of the abdomen should be treated. I shall make exploratory incisions, and having learned the extent of the injury treat it according to general principles, though partial or complete excision with drainage will generally be required. I have come to regard them as exceedingly dangerous, no matter how small the bullet.

As regards bullet wounds of the long bones, I have several patients walking the streets with them imbedded in the bones and they say that they suffer no inconvenience whatever. It is not necessary, therefore, to undertake their removal. Aseptic treatment is all that is required.

Penetrating wounds of the abdomen have been cared for according to the accepted rules of the day—laparatomy and repair of damaged organs, excepting in one instance when the

old expectant plan was followed. I read in some medical work on the subject, that bullets could penetrate and traverse the abdominal cavity with little risk of injuring any viscus when it entered at or near the median line, an inch or two above the umbilicus.

I was called to see a case at the Fitch Hospital, the attending staff of the hospital happening to be out of town. The man had received a small pistol ball in the locality described. He had been injured some hours previous to my visit. I found no pain present; pulse, temperature and all functions normal, and he said he was feeling well enough to go home. There was no doubt of penetration of the abdominal wall, this fact having been ascertained by the probe, but because of the location of the wound and his apparently normal condition, I advised waiting until morning and longer if no untoward symptom arose. The advice was followed and the next day he was so well that the Fitch surgeons hesitated to make a laparatomy, and it was not done that day and never was required, for in a few days the patient went home perfectly well.

I do not advocate this method of treating penetrating wounds of the abdomen, for I know of no way of assuring one's self that in a given case the bullet has not wounded intestine or other organ. The case, however, is of interest as it seems to support the assertion that because of the anatomical arrangement of the viscera a penetrating wound above the umbilicus may be devoid of danger.

146 ALLEN STREET.

Congenital Pulmonary Stenosis.[1]

BY JOSEPH BURKE, SC. M., M. D.,

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UNTIL about the middle of the 18th Century the observations upon the congenital heart lesions are found classified under the title of pathological-anatomical rarities and they excited as such, therefore, on account of the lack of knowledge of the symptoms, intra vitam, no clinical interest. Since this time, however, the communications, as from Morgagni, Sandi-

1. Read before the Medical Society of the County of Erie, June 17, 1902.

fort, Hunter, Peacock and others concerning cases of this nature, particularly concerning the examinations of malformations, which permit a somewhat longer life to the thus afflicted individual, have caused scrutinising scientific attention to be given to the pathogenesis of these congenital heart lesions and their causal connection with the frequent co-existing developmental anomalies, as well as to their manifestations, intra vitam. One might remember the wonderful classical representation from John Hunter, in 1783, in which this keen observer, as the first after Morgagni, upon rational physiological basis, endeavored to explain the connection between congenital pulmonary stenosis and the malformation in the intraventricular septum, an almost constant accompanying phenomenon of this arterial constriction.

Hunter's investigations concerning the pulmonary stenosis tended to prove that the blood in fetal life, which, as a result of the obstruction in the course of the pulmonary artery, hindered in its passage through this normal canal, must necessarily have created an outlet from the right ventricle into the left, certainly then when the development of the septum between these ventricles was not completed. Therefore, according to Hunter's opinion, the constriction at the pulmonary orifice is the primary lesion, and the incomplete closure of the septum a result of the stasis of the blood in the right ventricle; in other words, Hunter established the well known mechanical theory of stasis.

Some years later Johann Meckel collected many of the already published cases of pulmonary stenosis, of congenital origin, published them in connection with a few of his own observations, refused to accept the stasis theory of Hunter as sufficiently explanatory and endeavored to demonstrate these developmental anomalies upon purely embryonal basis. Later the works of Dittrech, Peacock, and Heine helped to throw more light upon these previously little understood pathological conditions, as also did the brilliant exposition of H. Meyer, in Zurich, concerning the results of these congenital heart lesions upon the fetal circulation, particularly concerning the etiology of pulmonary stenosis. In his concluding remarks the last author says:

If we bring together the results of the whole examination, we are justified in advancing the sentence that in all cases in which incompleteness of the interventricular septum and narrowness, or obliteration, of the pulmonary artery occur near each other as defects in formation, the latter is always primary, and that when it is present, not only is the incompleteness of the

intraventricular septum established but also the remaining coëxisting defects in formation in reference to the origin of the aorta, the foramen ovale, the ductus Botalli and the bronchial arteries. —Virchow's Archiv.

Kussmaul attempted in 1865 to assume a medium position and combine the embryonic and the stasis theory, to explain the causal connection between congenital pulmonary stenosis and the septum defect, and with this end in view published his well known "Correctur der Stauungs-Theorie."

In 1875, Rokitansky, as a result of his embryological investigations proposed an explanation entirely different, though by no means free from objections from those already taught for the origin of the septum defect, and endeavored to show that "the faulty division of the truncus art. communis, whose result is that a right position of the aorta occurs, is the primary arrest of development. Through this false position of the aorta the septum defect is caused, which in turn causes the faulty or insufficient conus formation."

If it be permitted a clinician to express himself concerning these questions of pure pathological-anatomical contents, I would conclude that from these theories that those from Kussmaul only could have general acceptation, particularly in the intermediary form; that at one time this method of occurrence, *i.e.*, the embryological developmental arrest, at another time, the process upon an inflammatory basis, primary pulmonary stenosis and secondary septum changes, would play a rôle. That the theory of stasis alone is not sufficiently explanatory appears from the following circumstances. We can picture to ourselves by a high degree of narrowing or complete atresia of the pulmonary artery only, that through the same, a change of pressure in the right ventricle occurs and as a result of which stasis and hindrance of the development of the septum become possible. By small or moderate degree of narrowing of the pulmonary artery such an explanation through stasis in the right ventricle and the purely mechanical working of the same upon the development of the septum cannot be accepted, since the right ventricle empties a small quantity only of blood into the pulmonary artery and through the ductus Botalli into the aorta. Against the solitary theory of embryological developmental arrest speaks the repeatedly advanced fact, that changes which prove to be of inflammatory nature in the fetal state were demonstrated in most cases thus far published.

Thus while the pathologists endeavored to explain the connection between these defects and the possible etiology of their origin, the clinicians did not keep equal pace with them. The literature of the cases of pulmonary stenosis of older date shows so great a disproportion between the clinical observations and their pathological-anatomical investigations that it speaks for a great deficiency in corresponding clinical interest, and caused Freymann to remark, "that accurate clinically observed pure congenital heart lesions belong to the rarities." It is thus not surprising when one considers that the observations were made principally upon children without an effort anatomically to accurately localise the lesion, and the generally advanced or accepted diagnosis of a congenital heart lesion sufficed.

In many cases of pure pulmonary stenosis the clinical diagnosis could be made without difficulty, because the classical signs allowed hardly another interpretation, but the more accurate diagnosis of the developmental anomalies which accompany them has become, on account of deficiency in explanation of the physical signs present, a subject of great speculation and a source of frequent error. For instance, how many cases do we find reported of pulmonary stenosis, in which on the theoretical basis, that because the second pulmonary tone was found accentuated the probable diagnosis of a persistent and open ductus Botalli was made and in which the autopsy failed to reveal even a trace of a persistent ductus Botalli, but demonstrated an open foramen ovale?

It is in reference to this lack of harmony between the clinical manifestations of these cases and the autopsy results and the heretofore universally taught pathognomonic signs that we feel ourselves not only justified but forced from the clinical observations of three classical cases of congenital pulmonary stenosis to report them in detail. It will show better how in each of them the socalled pathognomonic clinical signs though eminently present were found by the autopsy to have been utterly misleading and extremely confusing, particularly the constant presence of a remarkable accentuation of the second pulmonary tone, which caused the intra vitam diagnosis of persistent and open ductus Botalli to be made, while post mortem no trace of a persistence of this fetal communication could be demonstrated.

I will append herewith the detailed clinical histories, together with the post-mortem findings of these cases as additions to the

literature of this subject, and upon the basis of their constant clinical phenomena and an analysis of the accessible previously published cases of this nature, attempt to portray a complete typical, sharpely defined clinical picture of congenital pulmonary stenosis in the adult and to discuss in detail the diagnostic possibilities of the co-existing developmental anomalies. I would like to remark here that I found myself necessitated to deviate from the generally accepted theory that the predisposition to that so frequent, complication in these heart lesions, the pulmonary tuberculosis, is a result of a stenosis in the pulmonary artery, and instead of this to propose a better established and more acceptable theory—namely, that this predisposition is due to an anemia of the lung tissue, a result of a co-existing congenital narrowing of the aortic system.

Case I.—S.M., female, aged 17; accepted July 30, 1896; died October 3, 1896.

Anamnesis.—The father and one brother of the patient died of pneumonia; the mother of heart disease. Two brothers and one sister are living and enjoying good health. The patient affirms that she always up to her tenth year enjoyed good health, although her lips were always bluish and the color of the skin was always pale. At the age of ten she remarked for the first time that upon the slightest exertion she would become short of breath. This condition lasted until about two years ago, at that time heart palpitation and cough began to manifest themselves. The expectoration was profuse and greenish-yellow. Although she was always anemic and poorly developed she maintains that she has become emaciated and weaker during the past two years. At the present time she complains of shortness of breath, heart palpitation and harrassing cough. These increase upon the slightest movement. The expectoration is very copious, of a greenish-yellow color. The appetite is poor, bowels very constipated. The patient has never menstruated, and has never had rheumatism or any other infectious disease.

Status Presens.—The patient is small, gracile, poorly developed, very much emaciated, of slight muscular development and fat polster. She is very anemic. The both breasts are very small, undeveloped, crenes pubis sparsely present. The pulse is small, equal, rhythmic. Temperature, 102½° F.; pulse, 96; respiration, 32.

Head.—The head is small, well formed, moves freely. Nothing abnormal concerning the nose and ears. The hair is not profuse. The visible mucous membranes are pale, at the same time there exists a trace of cyanosis. In the mouth nothing abnormal. The cheeks present a circumscribed redness; the both pupils are equally wide, react promptly to light and accommodation. The movements of the eyes free.

Neck.—The neck is long, lean, shows no pulsation, no swelling of the glands.

Thorax.—The supra- and infraclavicular grooves upon both sides sunken in. The left side does not expand; there are no retractions of the intercostal spaces. Percussion: over both apices dull percussion note, particularly posteriorly. On the right side, anteriorly the dulness extends to the upper border of the fourth rib, posteriorly to the middle of the scapula; from this point downward, resonant note to one handbreadth under the lower angle of the scapula, the lung border is mobile by respiration. On the left side anteriorly, the short percussion note extends to the third rib, posteriorly to the middle of the scapula; from here downward, clear note to the normal limit, mobile by respiration. The vocal fremitus over the areas of dulness is increased, over the remaining parts distinctly present.

Auscultation: Over both apices, on the right to the fourth rib anteriorly, on the left to the third rib, posteriorly to the middle of the scapula, rough bronchial inspiration, metallic râles, prolonged bronchial expiration. Over the remaining portions puerile, vesicular breathing.

Heart.—The apex-beat lies in the fifth intercostal space, in the mammary line, is diffuse, undulating. In the second intercostal space, left from the sternum, one can feel a rough systolic purring—fremissment—which can be traced into the left shoulder. At the apex, a slight fremissment and undulation. The heart dulness begins above on the upper border of the third rib, to the left at the apex-beat, extends to the right to one fingerbreadth over left sternal border. Auscultation: at the apex one can hear a soft blowing systolic murmur, which is transmitted into the axilla, and posteriorly to the angle of the scapula; the second tone is clear. From here upward toward the base the murmur increases in intensity until over the pulmonalis, second intercostal space to the left, where one hears a pre- and systolic rough sawing murmur, which is distinctly transmitted into the left shoulder, but is not heard in the carotids; the second pulmonary tone is distinctly accentuated; as if hanging on to the second tone is a distinct diastolic murmur. The second aortic tone to be heard.

Abdomen.—The liver is not painful, not enlarged. The spleen not accessible. No edema of the lower extremities.

Sputum.—Tubercle bacilli richly demonstrable.

Urine.—Normal.

Decursus Morbi.—August 8, the lower extremities beginning to swell; the liver somewhat enlarged, painful; the cough still embarrassing; expectoration very copious. August 17, on the left side, just above heart, distinct physical phenomena of cavity demonstrable. October 1, the liver reaches to umbilicus, very sensitive upon pressure; edema of lower extremities increasing. October 3, death occurs under the picture of extremest orthopnea.

Post-mortem Findings.—October 3, external appearances correspond to the clinical description. In both lung apices very large cavities of tuberculous nature. Venous hyperemia of all the other internal organs.

Heart—(Dr. Landsteiner, of Vienna,) Length of the heart from the apex to the aortic orifice, 8 c.m. The size of the heart upon the whole corresponds somewhat to the size of a man's fist. The left ventricle roomy, the thickness of its wall, 0.9 c.m. The right ventricle a little smaller than the left, greatly hypertrophied, the thickness of its wall, 1 c.m. The walls of the right auricle thicker than those of the left. The aortic, mitral and tricuspid valves normally developed. Circumference of the aorta just above the valves measures 5.5 c.m. The circumference of the pulmonary artery, 2 c.m., above the valves, 7.5 c.m. The three cusps of the pulmonary valves are grown together in a regular manner, their borders are thickened and rounded, the opening is considerably constricted by these adhesions. By this growing together, a sort of a diaphragm, with a circular opening, in the middle is formed this opening has a diameter of 1.2—1.3 c.m. Between the valves and the wall of the pulmonary artery, deep sinuses. The conus of the pulmonary artery has a circumference of 4.5 c.m. The septum between the ventricles complete, no defect demonstrable. In the auricular septum, the foramen ovale is found wide open; the valvula foramen ovale is developed. Behind the foramen ovale, above the entrance of the ven. Thebesii, is a defect 9 m.m. long by 4 m.m. wide. This defect is oval shaped and has its greatest axis situated about parallel with the ring of the tricuspid valves.

Diagnosis—Stenosis and insufficiency of the pulmonary valves, open foramen ovale, defect in auricular septum, hypertrophy of the right ventricle of heart, Angusta aorta.

Epicrisis of Case I.—In this case we had to do with a gracile, weakly developed individual, who had never had an infectious disease; since she was somewhat stunted in her development—no menstruation, failure of crenes pubis, lack of development of breasts—and since her childhood had been cyanotic, the possibility was at hand that we had to do with a congenital heart lesion.

The constant physical findings: (*a*) remarkably strong systolic fremissment over the whole heart, most distinct over the second intercostal space to the left of the sternum, which could be followed into the left shoulder; (*b*) distinctly demonstrable enlargement of the heart to the right; (*c*) systolic sawing, rough murmur, most intense in the second intercostal space, left from the sternum, which was transmitted into the left shoulder, accompanied by a diastolic murmur, which closed itself upon a remarkably loud, accentuated diastolic tone; (*d*)

the proof of extensial tubercular infiltration of both lung apices: —justified our clinical diagnosis of stenosis and insufficiency of the pulmonary valves, congenital in nature, and on account of the accentuation of the second pulmonary tone a persistence and patulous ductus Botalli. The autopsy revealed no sign of a persistence or remaining open of the ductus Botalli, but a wide open foramen ovale and defect in auricular septum.

Case II.—K. L., book-binder; single; 22 years of age; accepted October 22, 1899; died October 25, 1899.

Anamnesis—The patient's father died from some disease of the chest, at the age of 46 years; his mother from pneumonia at the age of 42 years; two brothers died in childhood, one from diphtheria; cause of other's death unknown. Patient himself had during childhood scarlet fever, smallpox, typhoid fever, and three times pneumonia; in 1893 pleuritis. Cough has existed since childhood, dyspnea and palpitation as long as patient can remember. Patient affirms that he has always been as weak as at present; he has never had rheumatism. Alcohol very little; syphilis denied. Since the past four months increase of complaints, greater cough and more copious expectoration, more evident heart palpitation and intense dyspnea.

Status presens.—The patient is less than medium size, greatly emaciated, strongly cyanotic, particularly in peripheral parts; the visible mucous membranes very anemic; the eyes somewhat prominent, the pupils alike moderately wide, react somewhat slowly to light and accommodation; movements of eyes free. The teeth very defective, very much deformed. Skull somewhat hydrocephalic and rhachitic. The arteries soft, straight, the tension normal, the pulse wave low, the frequency 96, equal and rhythmical. The neck small and long, slight struma, distinct undulations of veins of neck visible, negative venous pulse.

Thorax.—The thorax is very long, small, very flat; the inspiration reaches its height after many interruptions. On the left side the breathing over the whole lung is bronchial, in places very weak, with loud metallic râles, distinct friction rub. All over, one can hear the heart tones, particularly over the left apex; the second tone appears as a murmur.

Heart.—The whole cardiac region pulsates distinctly; the apex-beat is in the fourth intercostal space, within the mammary line, distinctly visible. From this point toward the base and downward an undulation is transmitted, which ceases at second intercostal space to the left of the sternum.

The apex-beat can be felt distinctly, slightly heaving; can be covered by one finger tip. At the apex one feels a very short systolic and a diastolic fremissment. This fremissment is transmitted upward in the neighborhood of the clavicula and is most distinct over pulmonalis. The cardiac dulness begins on the left

at the mammary line, extends to the right a little over the left sternal border.

At the apex one hears a very rough, loud systolic murmur, the second tone very loud, clear. Over the pulmonalis one hears a very short pre- and systolic murmur, a very loud, accentuated second pulmonary tone, and an uncommonly long, hissing diastolic murmur. Over the aorta, two clear tones.

Lungs.—Intercostal spaces, supra- and infraclavicular grooves very much retracted. The left mamma higher than the right, precardial region more prominent than the rest of the thorax. The respiration is costo-abdominal; distinct movements of alænasi. The percussion note over both apices strongly dull, on the left more so than on the right; distinct tympany. The right lung reaches the upper border of the seventh rib, the mobility lessened. On the left side, in the first and second intercostal spaces, the note is dull, tympanitic; the lung reaches as far as upper border of the fourth rib, yet the heart dulness is difficult to differentiate from the dulness of the lung. On the right side the breathing is bronchial, moist, large and small râles in inspiration and expiration. Laterally pleuritic friction murmur can be heard on the left side, amphoric breathing, large metallic clinging râles.

Posteriorly over both apices, note dull, tympanitic, the left more tympanitic than the right. The right lung extends downward to one hand breadth under the angle of the scapula, very slightly mobile. On the left side the tympanitic note extends to the angle of scapula, from here downward dull, retains tympanitic character. On the right over the apex, sharp vesicular breathing; downward the breathing becomes bronchial, with loudly metallic sounding râles.

Abdomen, on level with thorax. The liver dulness greatly enlarged. The liver palpable. The spleen is enlarged. There is no ascites, no edema.

Beginning clubbing of fingerends.

Autopsy Diagnosis.—Excentric hypertrophy of the right ventricle and right auricle, with open foramen ovale. Hypoplasia of the aorta and peripheral arteries. Mechanical hyperemia of internal organs. Chronic tuberculosis of lungs, with cavities; adhesive pleurisy, left side. Tubercular ulceration of small bowels. Stenosis and insufficiency of pulmonary valves.

Epicrisis of Case II.—In this case the same symptom-complex as characterised case I. justified the diagnosis of a congenital valvular stenosis and insufficiency, and on account of the remarkably loud accentuated second pulmonary tone the diagnosis of a persistent and open ductus Botalli. In this case not a remnant of a ductus Botalli, but a wide open foramen ovale, was present at the autopsy.

Case III.—J. B., 21 years of age; accepted January 31, 1901; died March 5, 1901.

Anamnesis.—The father died after a fourteen days illness, of pneumonia; mother lives and enjoys good health. Patient has four sisters, all of whom are well.

The patient remembers that since his earliest childhood he suffered from dyspnea upon the slightest exertion, particularly when running or ascending stairs, and that his lips were always blue. He never noticed heart palpitation.

Four years ago he had pneumonia and pleurisy. During that attack he was confined to bed two months. Since this time he has noticed heart palpitation and increasing dyspnea upon the slightest muscular exertion. In March last year he expectorated blood. In November and December had severe cough with yellowish green expectoration. Since then the dyspnea has greatly increased and the palpitation become more perceptible.

At present the patient complains of shortness of breath and severe heart palpitation, night sweats and general weakness. Lately he has become markedly emaciated. He has never had rheumatism, nor any other infectious disease.

Status presens.—The patient is greatly emaciated, the skin-color, anemic. He possesses a rather good bony development, slight musculature and little fatty tissue. Temperature, p.m., 103° F., a.m., 36.6° F. Pulse 114, dicrotic, easily compressible, the artery small.

Head.—The skull is well formed, shows no abnormalities. Both pupils are normal, equal upon both sides, react promptly to light and accommodation. The movements of the eyes are free. The lips are anemic, cyanotic, livid; mouth, teeth and throat normal. Upon both cheeks is a circumscribed redness; mucous membrane of throat very pale. Tongue is moist, slightly coated. There is no difficulty in swallowing.

Neck.—The neck is long, small. No visible pulsation. Glands enlarged, not infiltrated. Both carotids pulsate alike, no purring to be felt. Arteries small; no distinct pulsation in the jugulum.

Thorax.—The breathing is costa-abdominal, dyspneic; the thorax is long, small, flat. Supra- and infraclavicular retractions on both sides. The fifth and sixth intercostal spaces on the right, retracted in inspiration. On the left side the eighth and ninth intercostal spaces retracted. The right side participates more in the respiration than the left. Tendency to "funnel-breast." Percussion: Anteriorly on the right note is dull tympanitic to third rib. From this point downward to the upper border of the sixth rib, good mobility—in para sternal line. In the axillary line as far as the sixth rib, good percussion note, then slight dulness, respiratory mobility not present. Posteriorly, over both apices dull, tympanitic note, which reaches the middle of scapula. From here clear note to one hand's breadth

below angle of scapula. Mobility not present. On the left side, dull, tympanitic note as far as upper border of second rib. In the axillary line, resonant note as far down as the ninth rib. Posteriorly over apex, dull tympanitic note. Distinct change of note upon opening and closing of mouth. The dulness extends to the middle of the scapula, from here downward, clear note to three finger breadths below the angle of the scapula; not mobile. Beginning at the lower border of the second rib, intimately along the left sternal line is a 2 c.m. wide dulness which extends downward and merges into the heart dulness. This dulness forms a triangle with the apex above on the lower border of the second rib.

Auscultation of lungs: In the right anteriorly to the third rib, bronchial inspiration and expiration, râles moist and metallic. Downward the bronchial breathing lessens in intensity. On the left, amphoric breathing as far as the second rib, metallic râles. In the axilla bronchial breathing. Posteriorly on the right, bronchial breathing, metallic râles, downward less intensial. Left, amphoric metallic, breathing metallic râles. The heart tones sound very metallic on this part. Over the rest of the lungs, rales and bronchial breathing to be heard.

Heart.—In the left lateral position the apex beat lies in the fifth intercostal space, two finger breadths outside of mammary line, not heaving. In the second intercostal space to the left of the sternum, one can feel a rough, very intense systolic fremissment, and a clapping second pulmonary tone. This fremissment is transmitted in the second interspace into the left shoulder, but not into the carotids. Percussion: Absolute dulness begins above on the upper border of the third rib, on the left at position of the apex, on the right as far as one finger breadth over left sternal border. The lung borders are promptly mobile by respiration. Auscultation: at the apex, dull systolic murmur; second tone clear, not accentuated. In the middle of the heart's dulness the systolic murmur assumes a rougher character; second tone loud, almost accentuated. At the junction of the third rib and sternum, murmur and tone more intense. In the second intercostal space to the left of the sternum, over pulmonalis one hears most distinctly an intensely loud rolling, systolic murmur, and remarkably accentuated clear pulmonary second sound; both murmur and tone are transmitted into left shoulder, and not so loud in the carotids. Over the aorta one hears the first sound, systolic murmur; second sound well rounded. Over the tricuspid the same finding. The systolic murmur can be heard all over left thorax.

Liver.—Not enlarged, not painful.

Spleen.—Cannot be felt, not enlarged, no edema.

Blood.—Shows secondary anemia, otherwise nothing remarkable.

Urine.—Normal with exception of presence of urobilin and skatol.

The "decursus morbi" of this case is so long and as it adds no light to the diagnosis, I shall omit it. I will, add, however, that repeatedly a distinct pre-systolic murmur could be heard over pulmonalis.

The patient died on March 5, 1901, under the picture of the most intense cyanosis and orthopnea.

Post-mortem.—Extensive tuberculous cavities in both lungs; adhesions of both pleuræ. Pulmonary stenosis and insufficiency, conus and valves stenosed. Foramen ovale persistent and open. Defect in interventricular septum. Hypertrophy of right ventricle, right and left auricles. Dilatation of auricles, particularly the right. Dilatation of pulmonary artery above the valves; congenital narrowness of the aorta. Passive hyperemia of the internal organs.

Epicrisis to Case III.—The clinical phenomena which this case presented deviated very little from the preceding two; on account of the remarkable accentuation of the second pulmonary sound the presence of a persistent and patulous ductus Botalli with conus stenosis of pulmonalis, was diagnosticated; on account of the age (21 years) of the patient, the uncommon loudness of the first tone over the pulmonary orifice and the systolic murmur in the vessels of the neck, a septum defect was presumed. At the autopsy there was not a sign of a persistent ductus Botalli; instead of this was a foramen ovale open, and a defect in the intraventricular septum.

Here were three cases of congenital pulmonary stenosis which presented themselves clinically in an eminently classical manner, in all of which an account of the permanent presence of a remarkable accentuation of the second pulmonary sound, despite the fact that a conus and valvular stenosis existed, upon the authority of the theoretical deductions of the physiologist the ductus Botalli was diagnosticated as persistent and patulous, and in all three cases not even a trace of this fetal communication was demonstrable at the autopsy. Upon the other hand, the foramen ovale was open in every one of them.

In order to facilitate our task it would be more to the purpose to accept the stasis theory as the most plausible, the pulmonary stenosis as the primary lesion and to study what purely mechanical phenomena would result in the fetal circulation, and then in the extra-fetal, in a case of congenital pulmonary stenosis of moderate degree.

Concerning the fetal conditions normally it will suffice to fol-

low the blood from the inferior vena cava to its final destination in the aortic system. From the inferior vena cava it passes into the right auricle, where, guided by the Eustachian valve it is directed into the left auricle through the foramen ovale. In the fetus the Eustachian valve is well developed and disappears after birth, its disappearance beginning with the suspension of its function, the closure of the foramen ovale. All of the blood which comes into the right auricle does not pass through the foramen ovale, but a small part passes through the auriculo-ventricular opening into the right ventricle from which it is pumped into the pulmonary artery by the ventricular systole; here instead of going into the lungs it passes through the ductus Botalli into the aorta. Thus the two streams of blood formed at the Eustachian valve meet again and form one column of blood.

Now let us suppose, for instance, that the small amount of blood which passes through the pulmonalis would be hindered, to a certain degree, by a stenosis of the opening of this artery. What results would such a condition cause? We proceed from the consideration that a case of moderate degree would show these results more distinctly than a case of atresia, and therefore will leave the latter out of the question. In the adult those cases only interest us which are of a moderate degree of stenosis; the cases of atresia we will therefore not bring into discussion, particularly above all on account of the brevity of observation which these cases present—they die mostly within a few weeks. It will be clear that these results depend upon the time of the origin or existence of the constriction and the extent of the anatomical changes. As the first result we find a stasis in the right ventricle. The result of this is that the venous blood would flow through the foramen ovale in greater quantities into the left auricle, since it passes in the direction of the lower pressure. Further, the stasis in the right ventricle would bring about a hypertrophy, which through its increased power can allow at least a quantity of blood equal to the normal, to pass through the stenosis. In concension, it can give rise to a "Dehiscenz" in the interventricular septum if it occur before the complete development of the septum. We thus see that from a purely physical consideration the pulmonary stenosis must have, under all circumstances, a certain influence upon the development of a septum defect or of an open foramen ovale. If hypertrophy of the right ventricle with increased working power occur, a result

of the presence of a stenosis of the pulmonalis, therefore can have no influence upon the remaining open of the ductus Botalli, a lesser degree of development of a hypertrophy would have a preventative influence.

An effect upon the septum defect would depend upon the time in which the stenosis of the pulmonalis occurs. Therefore in a case of congenital pulmonary stenosis in order that complete compensation in the fetal circulation take place, either a corresponding hypertrophy of the right ventricle must occur, or if this does not happen, the blood must find another outlet than through the pulmonary artery and the ductus Botalli, either by an increased flow through the foramen ovale into the left auricle, or through a defect in the interventricular septum or through both, and hence the ductus Botalli as a canal of communication from the right ventricle into the aorta would have very little function; in fact probably less than normal. One can very easily see that from a purely mechanical standpoint in pulmonary stenosis the remaining open of the ductus Botalli is a seldom occurrence, an assertion for the support of which we can quote statistics, which say that the ductus Botalli appears open correspondingly seldom in pulmonary stenosis. On the contrary, the foramen ovale appears very frequently, a fact which agrees with our resumé.

After we have considered the results of such a constriction of the pulmonary artery in the fetus, we can turn our attention to the results which take place in the circulation when the constriction at the ostium pulmonale persists. If the stenosis be complete, in order that the circulation remain in a state of compensation there must occur one of two things, either (1) the ductus Botalli must necessarily remain open, and either the foramen ovale or defect in the septum or both, must remain in function; the right ventricle can remain either hypertrophied or atrophied; (2) the individual must immediately die. In the cases where the stenosis is not complete—and these are the ones which interest us —the compensation depends on the hypertrophy of the right ventricle or on the existence of these defects, —namely, on the remaining open of the foramen ovale or on defect in the interventricular septum, or on both.

In the cases where the stenosis of the pulmonalis is patulous and a compensatory hypertrophy of the right ventricle exists, the ductus Botalli need not have any further function, and could persist as a very seldom occurrence after birth, a well known

fact to which the previously published cases attest. There are, therefore two possibilities for the compensation of a congenital pulmonary stenosis of moderate degree to consider: (1) Corresponding hypertrophy of the right ventricle without persistence of the fetal canals; (2) through congenital defects; the second of which is present in the great majority of cases.

We have considered in the foregoing the pure results of the pulmonary stenosis and the influence which it has upon the circulation. If we use these purely mechanical phenomena as a bridge to the symptoms, we arrive firstly at such which depend on the situation of the stenosis, then, as is well known, there are infra-valvular, valvular and supra-valvular stenosis. We will later have occasion to mention in our discussion of the clinical symptoms, that according to the localisation of the stenosis, one or the other symptom changes.

[*Concluded in September number.*]

A Resume of the Work of the Physicians' League During its First Decade.[1]

By ELECTA B. WHIPPLE, A. M., M. D., Buffalo, N. Y.

THERE comes a period in the life of every individual when it is beneficial to call a halt, make a review and take an inventory. The growth and advancement in medicine are marked by decades, and each decade has its characteristics. It seems fitting after the ten years' existence of our modest league, to cast up our accounts and approximately ascertain where we stand. The excuse for our existence ten years ago was founded upon the feeling of good fellowship, kindred ambition and the desire as associates "in the great workshop to join in the emulation of each other's attainments, enjoy our grand delusions, criticise each other's ideals and compare results."

We are now ten years old and have passed the experimental age—which all girls have—of trying on mother's (Alma Mater's) dress and proudly watching its long train as it sweeps the street far behind us. But we are now looking forward to the time when with impunity we may don our own trained dress, have our "coming out" and stand rank and file for "luminous comparison" with associations of older growth.

1. President's address, read before the Physicians' League, May 26, 1902.

In the fall of 1892, Drs. Jane W. Carroll, Mary I. Denton, Mary T. Green, Lillian C. Randall and Electa B. Whipple decided to form themselves into an organisation, known as the Medical League—to meet once a month from house to house. In January, 1894, Drs. Helene Kuhlman and Maud J. Frye became members, and in 1895, for good reason, the name was changed from Medical League to Physicians' League.

Ours is essentially a woman's league, although at the time of its organisation it was resolved that our brothers in the profession should not be precluded from becoming members. However, as members come into the league upon invitation only, our womanly modesty will likely continue to prevent us from changing the personnel of the league. From the initial membership of 5, the league has gradually added to its members until now 21 names—1 having resigned upon leaving the city —are registered, with 16 resident members.

There have been 97 meetings of the league and 87 papers presented and discussed since January, 1894—the first date of which we have record. Seventy-eight of the papers have been by members and 11 by invited guests, 8 of whom were women, viz.: Mesdames Mankell and Milanowski, of Buffalo, and Drs. Potter, Ballentine, Dickinson and Baldwin, of Rochester and Adams of La Crosse, Wisconsin. Three were by Drs. Mann, Wende and Gregory, of Buffalo. Thirty-three of the 78 papers have been on internal medicine, viz.: Cystitis, Parenchymatous nephritis, Diabetes mellitus, Chronic constipation, Pertussis, Exophthalmic goitre, Infectious diseases of childhood, Typhoid fever, Autointoxication, Bowel lesions, Tachycardia, Variola and varioloid, Epilepsy, Chorea, Scarlet Fever, Cerebral softening, Fissure of the anus, Gout, Hot-air treatment of rheumatism, Lithemia, Syphilis, Pyorrhea alveolis, Leprosy, Neurasthenia, Hysteria, Infantile Scurvy, Schott's treatment of heart disease, Sea-sickness and Cyclic vomiting. Twenty papers treated of gynecological and obstetrical subjects, viz.: Prolapsus uteri in the aged, Confinement, Early diagnosis of uterine cancer, Cardiac diseases complicating pregnancy, The infant and its food, Licensing midwives, Curettement and dilatation, Discharge from the uterine mucosa, Hydrocele in women (translation), Hydramnios, Intermenstrual phenomena, Use of the pessary in retro-displacements of the uterus, The bicycle saddle, Retro-deviations of the uterus, Dysmenorrhea in young girls, Amenorrhea, Helps in the treatment of version

and prolapsus uteri, Treatment of endometritis, Antisepsis in obstetrics and Malaria complicating the puerperium.

Ten papers pertained to materia medica, viz.: Salol, Ichthyol, Protonuclein and allied drugs, Animal extracts (thyroid, suprarenal capsules, bone marrow, etc.) Guaiacol, Lysol, Antipyrin, Orthoform, Some uses of Brewer's yeast, Patent and proprietary remedies.

Two papers on hygiene, viz.: School hygiene and The necessity of medical inspection in the public schools. Three were upon insanity, viz.: Insanity of childhood, Paresis and Dementia precox. Two papers given were upon bacteriology, viz.: The bacteriology of milk, and A study of the bacillus of diphtheria. One treated of electro-therapy and five papers were upon miscellaneous topics, viz.: Post gradute work at Johns Hopkins, Some personal observations in European clinics, Library of the Physicians' League, The Paquelin cautery and Babies' ward of the Erie County hospital.

Madame Mankell gave a paper on Medical gymnastics and massage, and Mrs. Milanowski one upon, The social condition of women in Germany. Dr. Marion Craig Potter, of Rochester, presented a paper on Retro-deviations of the uterus and treatment. Dr. Ballentine, of the State Hospital, Rochester, on Acute delirious mania. Dr. Mary Dickinson, of Rochester, on Diseases of the nose, throat and ear and their relation to other diseases. Dr. Baldwin, of Rochester, Early repair of the cervix and perineum. Dr. Frances Adams, of Syracuse, The truant school problem, and a paper by Dr. Abby Adams, of La Crosse, Wis., on Eclampsia was read. Dr. Dickinson also gave a paper before the league on Therapeutic application of electricity. Dr. Mann read a paper on Dress, illustrated by stereopticon views; Dr. Wende one on Skin diseases, and Dr. Gregory one on The pharmacopœia.

The first banquet of the league was held at The Genesee in June, 1895. The next was at The Niagara in June, 1897. In June, 1898, the banquet was again held at The Genesee, and at The Fillmore in June, 1899. The banquet was omitted in 1900 and in place of the June banquet, 1901, the league accepted an invitation by the Drs. Green, of Castile, to a delightful entertainment and collation there provided by them.

Instead of our prospective banquet in June, 1902, the league decided to entertain The Practitioners' Club, of Rochester, in October, 1901, which was accordingly done, holding a medical

meeting in the Women's Building on Pan-American grounds, followed by a tea given by the Board of Women managers in the afternoon and our annual banquet in the evening at The Buckingham. The average yearly attendance of members since the league attained its present numbers is as follows: 1899-1900, 8 per meeting; 1900-1901, 10 and a fraction; 1901-1902, 11—showing a gradual increase in the attendance.

During the present year, 1901-1902, there have been 8 meetings of the league, 16 papers presented—10 by members and 6 by guests—and 2 informal talks—1 by a member and 1 by a guest.

The first meeting of the year was at the home of Dr. Jane W. Carroll, the second at the Woman's Building, Pan-American grounds; the third with Dr. Electa B. Whipple, the fourth with Dr. Helene Kuhlman, the fifth with Dr. Katharine Munhall, the sixth with Dr. Cora B. Lattin, the seventh with Dr. Lillian C. Randall and the eighth, with Dr. Jane N. Frear.

We have had 13 guests this year. The usual plan of each hostess serving refreshments was omitted (for the year) on trial and in compensation a midwinter picnic was held when "the flow of soul" was along the lines of pharmacy, for which Dr. Gregory was responsible.

The entertainment of The Practitioners' Club, of Rochester, with other invited guests was an enjoyable feature, if we may judge from the expressions of satisfaction which have reached us. The success was largely due to the helpfulness of the general committee—Drs. Carroll, Frye and Cummings—and to the table committee, Drs. Frye and Clayton.

The constitution of The Physicians' League has this year been revised and greatly improved, for which credit is due the committee, Drs. Denton, Randall and Carroll. We are indebted to the topic committee, Drs. Clayton and Frye, for systematically arranging the literary program, in assigning subjects of papers that were closely related for each evening's entertainment.

The league has unanimously voted to purchase and maintain a crib, for one year, in the new Crèche, which is established by the Western New York Branch of the Association of Collegiate Alumnæ. The decision was hastened by the work of the committee, Drs. Lattin, Huntley and Carroll. We have this year added one honorary member—Dr. Green, of Castile—to our roll and placed an honorary member—Dr. Mary Clayton—on the active list. The policy of this administration has been carried

out with the greatest unanimity by the other members of the cabinet, Drs. Carroll and Kuhlmann.

From the epitomè presented, it must appear that some scientific work has been done and a moderate degree of success has been attained during the now closing decade. It may not be out of place to make a few recommendations: (1) we advise the consideration of making The Physicians' League a chartered society as is our neighbor, The Practitioners' Club; (2) we suggest that the league each year invite physicians, not members, to present papers, thus keeping ourselves in touch with others' work; (3) since our society is yet in the process of evolution let us not jeopardise its life by taking the league too seriously, but bear in mind that growth is the outcome of relaxation combined with hard work. If our shortcomings have been many, we at least lay claim to working in a spirit of honesty. We close the books at the end of this first decade for the opening of the new at the beginning of the second. May the records show greater progress in the coming years.

491 PORTER AVENUE.

A Detention Hospital or Pavilion for Acute Mental Diseases.[1]

BY F. H. STEPHENSON, M. D., Syracuse, N. Y.,
Neurologist and alienist to Syracuse Hospital for Women and Children, Syracuse Free Dispensary, Onondaga County and St. Vincent's Orphanage, etc.

THIS is a subject of vital importance throughout both city and country, to both individuals and the public, relating to the appalling conditions which have always existed in the care of our insane patients, pending their commitment to some sanitarium or state hospital for the insane.

Locked in cells, like any common burglar or murderer. Just think of the situation! These people are mentally ill, without self control, or judgment. They are often placed in cells of the municipal lodging house, the court house, or possibly the penitentiary, there to await their examination, commitment, and arrival of attendants who are to take them to some sanitarium. Many of these people are physically ill, and their mental disturbance only temporary, passing off after a few days or few weeks of treatment.

1. Read at the annual meeting of the Medical Society of the County of Onondaga, 1902.

Another question presents itself: Should these people be at once adjudged insane, and sent to an asylum, forever injuring their prospects in life in many ways, especially so far as ever holding any important position? We answer, most assuredly not. Our own county should provide a small, suitable pavilion, in connection with one of our city hospitals, as has recently been done in Albany, for instance, and as many other cities and counties are now doing, where these cases can be observed and treated by physicians experienced in mental diseases. Then, when suitable time has been allowed for mental disturbance to subside, or it becomes evident that the patient's illness will be necessarily prolonged, requiring special treatment and management, then a council of physicians may commit such patients to whatever institution the family, friends and the county judge deem best.

I have, in my own practice, taken many patients through attacks of mania, melancholia and other acute mental derangements whose condition has been known only to intimate family friends. Some of these patients have married, others have resumed responsible and lucrative positions which could not have been possible had they been publicly declared insane, and committed to institutions for that class of people.

Many of you must have met similar cases in your own practice, which have mentally cleared after a few days, or a few weeks' treatment. Do not misunderstand me in this matter, thinking I disparage our noble state institutions for the insane. Far from it! We must have them. They are doing a great work, curing a larger percentage of the insane every year.

I have spent weeks in the asylums of this country, and Europe, and have no criticisms to offer. The medical care is scientific, the nursing and management most excellent, and the food all that is required. Sanitation, food and surroundings are often far superior to anything the great majority of such patients ever before enjoyed. I only insist that we properly care for these patients preparatory to entering these institutions, and keep them under proper observation for a suitable length of time to determine, if commitment be necessary or wise.

My friend, Dr. Frederick Peterson, president of the New York state board of lunacy, is very desirous that every city or county should be equipped in this respect and is bending every energy in this direction of improving the care of the insane. The time will certainly come when more humane consideration

will be given these unfortunates. And can there be a better time than the present for pushing this subject before our humanitarians, politicians and the general public?

By way of illustration, may I ask your indulgence while I briefly report several cases which have come under my care, some within a few months, patients who fortunately were so circumstanced that they could receive special attention either in their own homes or in one of our city hospitals.

Case I.—Miss Q., aged 26 years, suffered from acute melancholia with terrifying delusions of persecution with depression, insomnia and incoherence of thought and expression. Patient tore her clothing, attempted suicide and would take food only under compulsion. On examination I found her anemic, thin, pale, tongue coated, constipated, urine scanty, loaded with urates, epithelium and pus; no albumen, sugar or casts; specific gravity heavy; urea scarcely ½ per cent. Had not slept for ten nights. Under treatment this patient made a perfect recovery, home care having been all that was necessary. She reëntered society, has married, has had no recurrence of the malady, and her illness is now only spoken of as some serious nervous trouble that for a time disturbed her mind.

Case II.—Miss B., was ill four months with acute mania with marked excitement and exhaustion. This case was dependent upon anemia; forced feeding, tonics, sedatives, rest, eliminatives, quiet, massage, and the like, brought about a condition of normal mentality and physical health. She was not removed from her home.

Case III.—Miss D., recently seen with Dr. Wynkoop, was excited, confused, incoherent, sleepless and delirious. A few days' rest, quiet, stuffing diet and tonics, with proper sedatives, brought about mental balance, and she convalesced quite rapidly from a condition of nervous exhaustion, dependent upon anemia, at the Woman's and Children's Hospital.

In such a case as this how evident is the wisdom and desirability of treating an unbalanced patient in one of our own hospitals rather than subjecting her to the publicity of commitment to an insane asylum in the beginning.

Case IV.—Mr. E., suffered from confusional insanity, insomnia and excitement due to an alcoholic debauch. A nurse, with the patient's family, cared for him until within four weeks. He made a good recovery without having been sent from home.

Case V.—Mrs. P., referred to me by Dr. Slingerland; at the menopause had an attack of melancholia, with confusion, delirium, insomnia, and marked prostration. Eight weeks in

the Woman's and Children's Hospital, with special treatment and management, have resulted in a complete cure. Her husband told me recently he fully expected she would have to be sent to an asylum.

Case VI.—Miss F., a teacher in one of the public schools of Denver became overworked, developing neurasthenic conditions. Then followed the loss of all her savings in a wild cat investment. This produced a period of excitement, accompanied with violence, smashing of windows, and the like. After a few days of excitement, she settled into a condition of melancholia with delusions, but was quiet.

This patient made a perfect recovery in the Woman's and Children's Hospital, and had no difficulty in obtaining a good position in the high school of one of our neighboring towns. Had her nervous and mental condition been treated in an asylum, that fact alone would have prevented her securing so responsible a position in any place where the truth was known.

Case VII.—Dr. P., from a town not 500 miles from Syracuse, came to our city to consult a laryngologist for throat treatment, having a delusion that he had swallowed pieces of bone, that still remained in his throat. A second physician was consulted because the first did not remove them. He was then referred to me. Calling at his hotel, I learned that he was addicted to the use of cocaine, heroin and morphine. I arranged for his entrance into St. Joseph's Hospital on Monday, the following day, but a sudden impulse decided him to go at once to Albany; therefore he rushed to the train, getting on to the rear platform of the last car, his wife being unable to restrain him. While in Albany he was taken to the City Hospital. This was before the establishment of the detention pavilion. He made so much disturbance that he was arrested, taken to the lock-up, and came before the judge. When his mental condition was recognised, physicians were appointed to commit him to an asylum, where a few weeks' treatment sufficed to restore his mental equilibrium, and he resumed practice.

Imagine the anxiety and suffering which the doctor's wife and friends endured while he was thus shifting from place to place, being arrested, and the like. How they suffered from the notoriety and deprecated the injury to his practice. A hospital in our city, with a detention pavilion for acute cases, or mental suspects, would have prevented all this, and it must appeal to all of us as the only humane manner in which these patients can be cared for.

Mental disturbances are very frequently observed in people of neurotic temperament and ancestry, caused, or augmented by

anemia, overwork, worry, or excess; also by the menopause, malassimilation, shock, debility, drug habits, and age. Often these mental symptoms are of brief duration, and a detention pavilion affords every facility that the general hospital and the special hospital combined can offer for the cure of these patients. Their ultimate recovery is not retarded by being transferred a few days or weeks later, should continuance of mental disturbance decide in favor of so doing.

Of course we all realise the strong probability of a recurrence of many of these mental maladies, and that a mental scar is liable to follow insanity. But a sick and unbalanced brain is no disgrace, and is as real an illness as a disordered liver, stomach, appendix, lung, or any other organic or functional disease.

But we cannot disguise the fact that a mental malady in the eye of the world is a stain upon a family, and we physicians are placed where we should and must protect the masses—not only by instruction in correct living—how to keep mentally and physically well—but it is also our duty to ensure prompt and thorough care of minds diseased, protecting such unfortunates and their friends from unnecessary publicity, mental anxiety, oversensitiveness and injury to their social and business standing. We can only accomplish this by providing, as soon as may be, a suitable and satisfactory retreat, which will prevent a premature and needless commitment and detention in the regular hospitals for the insane.

429 University Block.

Summer Diarrheas of Children and Their Treatment.

By M. A. AUERBACH, Ph. G., M. D., New York City.
Medical Inspector, Department of Health.

THE importance of these demand a separate consideration. Three forms, more or less distinct, can be recognised—namely, acute dyspeptic diarrhea, cholera infantum, and acute enterocolitis.

Acute Dyspeptic Diarrhea.—This disease is chiefly due to errors in diet, which do not necessarily consist in the substitution of unnatural foods for the mother's milk. The mother's milk may be altered in quality by emotional causes, by improper food and improper hygiene, or it may be caused by over-frequent

nursing. More often, however, it is caused by the ingestion of unnatural foods.

There are also predisposing influences which facilitate the action of the exciting causes. These are especially dentition and the extreme heat of summer. The prognosis of the disease among the better classes is commonly favorable, but among the weak, puny, and half-starved children of our lower east side, large numbers perish, especially during the summer months.

The old time treatment in these cases was a primary purge with calcined magnesia or castor oil. After the purge bismuth subnitrate or prepared chalk was given. Since the introduction of glyco-thymoline, the above mentioned methods have been cast aside. A very good and effective prescription which has given me most splendid results in these kind of cases, in conjunction with a carefully restricted diet is:

R Bismuth subnitratis . . . . . ʒi.
Tr. opii deoderatum . . . . . m. x.
Glyco thymoline . . . . . ʒii.
Aqua rosarum ad. q. s . . . . . ʒiv.
Misce et
Sig. dr. 1 every 3 hours. (For a child one year of age.)

Cholera Infantum is a variety of acute catarrhal enteritis of intense severity, corresponding in symptoms and course to cholera morbus in the adult, but much more serious in termination. The prognosis in these cases is at best not very favorable, although recovery is not impossible.

The treatment is of quite a different nature from that above mentioned. In the first place, the fever must be combated, and I know of no better method than a bath containing some glyco-thymoline, at about 80° F., reduced by adding small pieces of ice to 70° or 65°. Next, pain should be controlled by 1-100 of a grain of morphine sulphate, administered to a child of one year; then stimulation with strychnia, hypodermatically, iced champagne to prevent vomiting, brandy, whiskey and other stimulants.

One of the best methods for irrigating the large intestine is by introducing a small, soft catheter through the rectum and injecting into the bowel about a pint to a pint and a half of warm water, containing about 25 per cent. of glyco-thymoline. This I find removes and prevents the reaccumulation of the fermentive as well as the putrefactive products of the bowel. Should,

however, the hyperpyrexia continue, the douche may be given at a lower temperature. During convalescence great care must be taken in feeding of the patient.

Acute Enterocolitis is an affection of an inflammatory nature, more severe than dyspeptic enteritis, chiefly of the ileum and colon, affecting especially the lymph follicles. This like the preceding is a disease of the hot months of summer, and especially the period of teething. It is produced by the same causes as dyspeptic diarrhea. It is most frequent between the ages of 6 and 18 months. It likewise may be a termination of dyspeptic diarrhea, or of cholera infantum.

In the treatment the general surroundings and hygiene necessarily play an important part. The medical treatment, however, is somewhat different from the other. Anodynes are most imperatively demanded because there is greater suffering, and depletion may be needed in the beginning by salines, though good judgment is required because the child's strength must be watched. The colon should be flushed with a solution of glyco-thymoline having a strength of 25 per cent. This I find answers admirably in these cases. The solution may be made with iced water. The coming teeth should likewise be watched and the gums be scarified whenever required.

I will supplement my remarks by adding a few of the many cases treated with glyco-thymoline and leave results to speak for themselves.

Case I.—M.K., aged 8 months; male; was taken with severe vomiting and colicky pains at night. The vomita contained lumps of coagulated milk. The stools were very offensive and recurred at intervals of twenty minutes. I left a prescription for glyco-thymoline, 2 oz., bismuth subnitrate, 1 dr., rose water enough to make 4 ozs. Next morning, finding but little improvement in my patient, the bowel was at once flushed out with a 25 per cent. aqueous solution of glyco-thymoline, and the prescription given the night previous was continued. This treatment was maintained for three days, the patient steadily improving during that time. I recommended that the child be taken away from the city, which was done. The parent reported later that the child had not had a relapse but made a speedy recovery.

Case II.—Mary C., age $7\frac{1}{2}$ months was brought to my office with her knees drawn up, a look of anguish on her face, which was pale and drawn, with eyes protruding. She had a number of watery discharges from the bowels, incessant vomiting, a temperature of $103\frac{1}{2}^{\circ}$, a rapid and feeble heart. A further examina-

tion was unnecessary. Anodynes were at once administered, to soothe the pain. I washed out the bowels with a 40 per cent. solution of glyco-thymoline, and administered the same in a 50 per cent. solution, with peppermint water internally, in doses of 1 teaspoonful, repeated every two hours. The results in this case far exceeded my expectations The child made a slow but successful recovery.

Case III.—L.P., male child, age 16 months; was called to check the diarrhea, which was of a severe character having a tinge of blood. The vomiting was not of a serious nature; the only alarming symptoms being intestinal. Three separate washings of the child's colon were made at intervals of six hours. Food was restricted to barley water; this case, like the one preceding, made a perfect and speedy recovery.

Case IV.—R. A., a little tot of the east side, aged 13 months, brought up in one of the dark and dingy rooms of a tenement house; this poor little one was suffering for five days before my attention was called to the case. I found it in an emaciated condition, unable to move a limb, the bowel movements were frequent and watery; collapse was imminent. Strychnia was administered, hypodermatically, to stimulate the heart, after which diluted brandy was given every half hour. The colon was irrigated with 24 oz. of a 50 per cent. aqueous solution of glyco-thymoline. I had the child under my observation for two and one half weeks, and with proper food and fresh air, a good recovery resulted.

CLINICAL REPORTS.

Acetozone in Typhoid Fever.

By G. H. WESTINGHOUSE, M. D., Buffalo, N. Y.
Visiting Physician at the Buffalo Hospital Sisters of Charity.

AS THE writer has had a somewhat extensive experience in the use of acetozone (benzoil-acetyl-peroxide) in the treatment of typhoid fever, he thinks it may be of interest to the profession at large to briefly review a few of the more severe or complicated cases, and to add a few comments bearing upon the action of this new therapeutic agent. Unfortunately, many of the bed-side records of the patients have been lost, rendering impossible a complete report of many of the cases thus treated.

Altogether forty cases of typhoid were under my care at the hospital during the summer of 1901. Complications were many and varied, and the patients were admitted during all stages of the disease. There were, however, no hemorrhages, and not a single fatality. The following statements are presented of the results obtained during the treatment:

Case I.—F.R., aged 14 years; admitted to the hospital July 27, 1901, this being the fifth day of the disease; temperature when admitted, 101°. Acetozone treatment was begun immediately. The temperature began to subside at once, becoming normal on the fourteenth day. On the nineteenth day endocarditis developed, with a rise in temperature to 103 1-5°, this continuing until the twenty-second day, when the temperature again subsided. On the twenty-fourth day phlebitis of the saphenous vein developed with a rise in temperature 101 2-5°, which gradually subsided. No hemorrhages occurred and recovery was complete, the patient being discharged on the forty-second day.

Case II.—P.S., aged 37 years, with a temperature of 102 1-5°, was admitted to the hospital August 28, 1901, this being the seventh day of the disease. Acetozone treatment was begun immediately, with a gradual subsidence of temperature. Soon after this, pneumonia with kidney complications developed, with a rise in temperature which gradually declined and was followed by complete recovery. The patient was discharged on the fifty-eighth day of the disease.

Case III.—J. M., aged 12 years. Entered hospital on the eighth day of the disease with a temperature of 103 1-5°. Acetozone treatment was begun immediately; a gradual reduction in temperature followed, becoming normal on the fourteenth day and remaining practically normal until his discharge, which occurred on the fortieth day of the disease. Convalescence was prolonged on account of complications which followed typhoid symptoms.

Case IV.—W. R., aged 9 years. Admitted to the hospital on the fourth day of the disease, with a temperature of 103 4-5°. Acetozone treatment was begun immediately, and temperature became normal on the fourteenth day. Owing to complications which developed following the reduction of temperature to normal on the fourteenth day, the convalescence of this patient was somewhat prolonged; but he was finally discharged with complete recovery about the thirty-fifth day.

Case V.—Mrs. C., aged 30. Admitted to hospital on tenth day of disease, with temperature of 103°. Acetozone treatment began immediately, with reduction of temperature to normal on the fourteenth day. This case is remarkable from the fact that

at the climax of the disease, collapse developed. Subcutaneous injections of acetozone solution raised to the normal alkalinity were injected under the breasts on two occasions; twenty-four hours intervened between the injections; another injection of 500 c.c. acetozone solution with 500 c.c. normal salt solution, after another interval of twenty-four hours. A noticeable improvement followed immediately after the injection of the acetozone solution. This patient went on to perfect recovery, and was discharged about the thirty-eighth day of the disease.

Case VI.—A. W., aged 16 years, was admitted to the hospital August 12, 1901, on the tenth day of the disease; temperature, 104 1-2°; patient muttering in delirium; abdomen enormously distended; condition decidedly toxic. The use of acetozone solution was begun immediately; the temperature declined to the normal on the fourteenth day of the disease and continued normal until the patient's discharge, on the twenty-eighth day. Recovery was uncomplicated and uneventful.

Case VII.—C. K., aged 24 years, was admitted on the ninth day of the disease; temperature, 102 1-5°. Treatment by acetozone solution was begun immediately. The temperature reached the normal on the fourteenth day of the disease; convalescence was rapid and the patient was discharged from the hospital on the twenty-fifth day after admission. No complications occurred and recovery was complete.

In order not to prolong this article, the writer will conclude by saying that the convalescence of the patients was rapid, but they were retained in the hospital a considerable length of time to insure against a relapse. Under the use of acetozone the characteristic fetor of typhoid stools completely disappeared in two or three days; the usual relaxed condition of the bowel had wholly subsided by this time, rendering the use of either enema or laxative unnecessary.

Not the least useful effect of the acetozone was the diuresis developed when the aqueous solution of the antiseptic was taken in quantities sufficient to render the alimentary canal aseptic. This diuretic effect was marked, one patient having voided no less than 112 ounces of urine in twenty-four hours. A corresponding reduction of typhoid symptoms followed; tympanitis and delirium disappeared. The diagnosis of typhoid fever was confirmed, in all cases, in the laboratory by Widal's reaction, Ehrlich's test, and by blood count.

It is unnecessary to say anything further than that acezotone, as an intestinal antiseptic, is unequaled by anything I have ever employed. A complete subsidence of all the bowel symptoms

followed in every case of typhoid within a few days after beginning its use. The application of the antiseptic consisted, in most cases, in simply allowing the patient to drink the saturated solution, *ad libitum*; or, in other words, substituting this solution for all other liquids, and urging the patient to partake of it freely where the natural craving was not sufficient to insure the consumption of considerable quantities.

NOTE.—The antiseptic above referred to, benzoil-acetyl-peroxide, was originally supplied by Messrs. Parke, Davis & Co., of Detroit, Mich., under the name of benzozone. The manufacturers have recently announced that in order to avoid confusion through a resemblance of this term to the name of another antiseptic placed upon the market some years ago, it has been decided to employ the name acetozone, instead of benzozone.

Treatment of a Carbolic Acid Poisoning.

By FRANCIS E. FRONCZAK, A. M., M. D.; Buffalo, N. Y.

AS carbolic acid is one of the swiftest of the deadly poisons, promptness in action is necessarily of utmost importance. No doubt the most common and most easily obtainable antidote of carbolic acid known at present writing is probably alcohol, whether in the form of a staple article or as brandy or whiskey. It is more easily in reach than magnesium sulphate or sodium sulphate, the so-called natural chemical antidotes of carbolic acid, which follow it through the blood and the tissues and there neutralise it by changing into insoluble sulphocarbolates. Hence the first thing to do is to give the patient some brandy or whiskey, about four or five ounces at least. If the patient cannot swallow it, pour it into the stomach through the stomach pump which must be introduced into the pharynx. Then remove the contents of the stomach, and wash it out by either of the soluble sulphates—magnesium or sodium, and also give through the rectum, the solution being in the proportion of an ounce of the sulphate to a pint of water. Sodium sulphate may also be given hypodermatically, not however the magnesium, which when injected into the blood is known to be very poisonous.

Atropine sulphate about 1-60 of a grain should be given hypodermatically every half-hour for several doses (about two or three hours) thus stimulating the respiration which is usually

in a very bad condition. I also apply artificial heat to the extremities, and a turpentine stupe to the abdomen for the relief of the pain. The patient having "come to" it is best to feed him for several days by the rectum, and when the stomach is able to receive and retain food, it should be given in the form of liquids, as milk, broths and mucilaginous preparations, as the mucilage of slippery elm. If any complications arise they should be treated secundum artem.

508 Fillmore Avenue.

Erysipelas Treated with Antistreptococcus Serum.

By L. BRADLEY DORR, M. D., Buffalo, N. Y.

I WISH to report two cases of erysipelas in infants successfully treated with antistreptococcus serum. I have used the serum many times in adults with marked success, but the age of these children makes the cases interesting.

Case I.—A boy eight months old, who had erysipelas of the face and head. The edema was so great that eyes and nose were obliterated. The temperature of the surface of the body was 105° F. and the pulse 150. Five c.c. of the serum was given and a local application of ichthyol. In forty-eight hours the child was well.

Case II.—A child two weeks old, who had erysipelas over the anterior part of the body from the umbilicus to its knees. The point of infection was the penis from circumcision. The temperature of the body surface was 105.2° F., the pulse was too rapid to count and the child was convulsive. The same treatment was used as in the first case with as good and prompt result.

TRANSLATION.

Anesthesin.

(Para-amido-benzoicacidester.)

A LOCAL ANESTHETIC.

By PROF. CARL VON NOORDEN, of Breslau.

(*Ber. klin. Wochensch., April 28, 1902*)

THE ethyl-ester of P-amido-benzoicacid $C_6H_4 \cdot {}^{NH_2}_{COOC_2H_5}$ was first prepared by Dr. E. Ritsert, of Frankfort on the Main, in 1890, and was recognised by him as a non-toxic local anesthetic. Although this substance aroused great interest

among various pharmacologists as a member of a hitherto unknown group of anesthetics, and was especially welcomed by Filehne as a confirmation of his theory of the anesthetic action of the benzoyl group, clinical proof was lacking because of the difficult solubility of the substance in water which thus afforded no prospect of fulfilling the long cherished desire of securing a non-toxic substitute for cocain. Some seven years later meta-amido-p-oxybenzoic-methyl ester (orthoform) was prepared by Einhorn, and despite its insolubility in water was introduced into therapy; whereupon it now became advisable to subject the forgotten amido-benzoicacidester to clinical examination, and all the more so because orthoform had been criticised for its irritating quality and the relative toxicity which proceeded from its phenol-characteristics. It was expected that these unpleasant collateral effects would be much less noticeable in the case of an amido-benzoicacidester, which was designated anesthesin.

Dr. Ritsert gave this preparation to me some two years ago, since which time I have used it uninterruptedly and possess a very extensive experience with the agent.

Anesthesin is a white powder, without odor or taste. When placed upon the tongue a sense of numbness results. The drug is soluble with difficulty in cold water, somewhat more freely in warm water and very freely in alcohol, ether, chloroform, aceton, fats and oils. It may be mixed with fats of all kinds to form ointments without undergoing decomposition.

At my request, Prof. Benz, of Bonn, instituted certain animal experiments in order to test the toxicity of anesthesin. One of these experiments may be cited in this connection. Anesthesin to the amount of 0.6 gm. (10 grs.) was administered to a rabbit in 20 c.cm. of an oily solution, by means of the stomach tube. On the following day the animal was found in good health with urine normal.

The combined experiments which practically resulted negatively, show that in moderate doses anesthesin exerts no deleterious influence upon the animal organism. Given even in colossal doses, the only notable effect is a transient methemoglobinemia. Renal irritation and methemoglobinuria were never observed. The toxic action of anesthesin is therefore seen to resemble to some extent that of phenacetin, to which it is chemically related; and it appears to be strongest when the drug is dissolved in oil.

Prof. Kobert, of Rostock, also tested this drug in regard to its toxicity. His studies show that anesthesin is non-toxic and that it may be used clinically without reservation.

Further research will be required to determine why the anesthetising power on the sensory nerve. We know that if the undissolved powder, finely divided, is applied directly to an exposed nerve-trunk, the electrical excitability of the nerve is not depressed thereby, nor is the sensibility of the area supplied by the nerve in any way modified (Binz). These investigations should be repeated with oily solutions of anesthesin. Thus far no unpleasant collateral effects have been noted in connection with any method of exhibiting anesthesin. There is, therefore, no necessity to cite individual cases, as a general summary will suffice to give the indications for the new remedy as thus far determined.

Anesthesin may be given by the mouth in powder form, 0.3-0.5 gms. (4 to 7½ grs.) two or three times daily for hyperesthesia of the stomach, by which term is understood the painful sensations which follow the ingestion of food including nausea.

Most of these cases could be described as nervous dyspepsia, although some instances of gastric ulcer were present. In this class of cases anesthesin proved to be at least the equal of chloroform-water, chloralhydrate and orthoform. In a few instances it was superior to any of the latter in intensity and duration of action. I would suggest that in cases of this sort the anesthesin should be given from ten to fifteen minutes after the ingestion of food. The highest daily dose given was 2.5 gms. (37½ grs.). The direct administration per os also includes the use of anesthesin in the form of lozenges, and the like, for cough and dysphagia. The dose in each lozenge, gum-drop, and the like, should vary from 0.02 to 0.04 gm. (⅓ to ⅔ grs.) When the irritation is located in the pharynx or entrance to the larynx, the action of the drug is extremely sedative, resembling that of the so-called "angina-pastilles," which contain antipyrin and cocain, but lasting much longer. The patients, including many with tuberculous laryngitis, preferred the anesthesin lozenges to the pastilles. An emulsion of anesthesin (10 per cent.) in water and gum tragacanth, a 3 per cent. solution in 45 per cent. alcohol and direct insufflation of the powder, were all used in hyperesthesia of the larynx in order to determine the relative efficacy of the new drug with orthoform. Anesthesin was found to possess all the anesthetic properties of orthoform and to be quite free from irritation. The author found that insufflation of

the powder produced the best effect, and that in this form anesthesin is the best known anesthetic for the larynx.

In suppository form, 0.2-0.5 (3 to 7½ grs.) anesthesin to 2.0 (30 grs.) cocoa butter, the drug was tested in tenesmus and painful hemorrhoids. For tenesmus it was found inferior to the opiates and belladonna preparations. But for painful hemorrhoids anesthesin gave remarkably good results. Not only were the pain and pruritis favorably affected, but the hemorrhoids were essentially reduced in size. The superiority over orthoform was marked.

Exhibited in the form of soluble bougies, 0.3 (5 grs.) anesthesin in each, the new drug was used in non-specific vesical tenesmus in three females, by introduction into the urethra. In each case the results obtained were highly satisfactory. The treatment was of short duration. Too much should not be claimed for these results, as simple cocoa-butter bougies are sometimes sufficient to relieve this condition. The results obtained from the use of the anesthesin (10 per cent. anesthesin in lanolin) in certain forms of pruritis were brilliant, and more especially in the pruritis vulva which accompanies diabetes. The author has treated over a dozen cases in which the tormenting symptoms with their attendant phenomena of insomnia and nervous excitement were relieved. In cases of this type the strictest diet, the complete disappearance from the urine of glucose and the exhibition of asperin were all without effect. Cocain ointment, even in toxic doses, failed to produce more than a transitory improvement. In all these cases without exception, the anesthesin ointment brought about rapid improvement and when its use was prolonged a permanent cure resulted. Anesthesin was also used in chronic perineal eczema, eczema of the scrotum, and the like, with similarly good results. Decided improvement in the pruritis appeared to influence favorably the disease itself, although it may simply have indicated that a cessation of itching led to the omission of scratching. Anesthesin ointment was found to be very efficacious in recent intertrigo.

Finally it should be mentioned that anesthesin was of value in a certain number of cases of icteric, nephritic and senile pruritis; in certain cases, especially in icterus, the results were strikingly good. It must be admitted that complete failures were recorded.

In brief, anesthesin has an undoubted anesthetic action in many and varied conditions without any known drawbacks. It is especially devoid of irritating properties.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

Semi-Annual Meeting.

REPORTED BY FRANKLIN C. GRAM, M. D., Secretary.

THE semi-annual meeting of the Medical Society of the County of Erie was held in the Y. M. C. A. parlors, Pearl and Mohawk Streets, Buffalo, June 17, 1902.

The president, Dr. W. M. WARD, called the meeting to order at 10.30 a.m., and the secretary read the minutes of the previous meeting which were approved.

Dr. William Warren Potter, chairman of the membership committee, presented the names of Dr. Joseph Burke, Dr. Adolph H. Urban and Dr. H. L. Atwood, and recommended their election as members. The recommendation was adopted. Dr. Potter also reported for the committee on legislation that the usual attempts to pass injurious medical laws were made at the last session of the state legislature, but through the combined efforts of various committees they had failed.

Dr. J. B. COAKLEY, chairman of the Board of Censors, submitted the following report, which was adopted:

To the Medical Society of the County of Erie:

Your board of censors respectfully reports that since its last report made to the society, January, 1902, the censors have continued their usual methods of work in the investigation of cases of alleged illegal practitioners of medicine and surgery.

The most important matter which was pending at the date of our last report was the action against "Professor" A. J. Wiechers, otherwise known as "Antonius, the Boy Phenomenon." At the date of our last report Wiechers was under bail to appear before the Grand Jury and answer to the charge of the illegal practice of medicine. Since that time, his case has been presented to the Grand Jury which, acting under the advice of the District Attorney's office, refused to find an indictment. The chairman of the board of censors had quite an extended interview with the staff of the District Attorney's office in reference to this case and was informed that the District Attorney's office had advised the Grand Jury not to bring in an indictment against Prof. Wiechers for the reason that it could not be shown that Prof. Wiechers had personally ever received any monies or compensation for his treatment from his patients, but that all monies paid for such treatments had been received by others, in most cases duly licensed physicians, who were so lacking in principle and regard

for the standing and dignity of their profession that they had permitted themselves to be employed by this alleged healer as members of his staff to further his unworthy ends. Furthermore, the District Attorney's office insists that the massage treatment, manipulation, and rubbing, practised by the Boy Phenomenon does not come under the head or within the definition of the practice of medicine.

The District Attorney and his assistants seemed to take the position that they are the judges of what constitutes the practice of medicine rather than the members of the medical profession, and by this prejudging the case refused to permit these alleged violations of the law to be submitted to a jury in the light of the facts and the interpretation to be placed upon medical terms and the meaning of the phrase "Practice of Medicine" by members learned in that profession. The District Attorney's office although differing from your board as to what constitutes illegal practice of medicine has at all times been very courteous in its treatment of your board of censors and has shown every disposition to assist the board in every way possible, according to their understanding of the legal situation, in the prevention of the violation of the law and punishment of those guilty of such violation.

Since our last semi-annual report your board has also carefully prepared a list of the names of persons given in the Buffalo directory as physicians, who were not duly registered as such and a circular letter was sent to each of said persons, about thirty in all. Of this number to whom such circular letter was addressed seven were unable to be found in the city by the post office authorities and the letters were returned with the statement that the several parties had left the city. Two more have left the city since. Of the remainder, seven were found to be dentists, one a doctor of philosophy, one a plumber, and one a medical student, whose name through mistake or inadvertence had been inserted in the list of practising physicians. However, as a result of the efforts of your board in this direction at least nine persons who were presumably illegally practising medicine in the city have been forced to leave town.

Since our last semi-annual report several cases of chiropodists and magnetic healers illegally practising medicine or using the title of "Dr." have been reported to your board and investigated, and in nearly every instance persons against whom such charges have been brought have either left the city or discontinued such illegal practice.

All of which is respectfully submitted.

J. B. Coakley, Chairman.
H. R. Hopkins,
Irving W. Potter,
Francis E. Fronczak,
Henry Lapp.

Dated Buffalo, N. Y., June 17, 1902.

A donation of $5.00 was voted the janitor of the building for preparing the rooms, as no rental is demanded by the Association for their use.

The members then listened to a very instructive and interesting paper on

NASAL DEFORMITIES AND THEIR CORRECTION,

By Dr. JOHN O. ROE, of Rochester. Various illustrations and photographs were shown, and materially assisted in demonstrating a vivid description of cases by the lecturer. A cordial vote of thanks was tendered Dr. Roe for his able address.

Dr. WILLIAM C. KRAUSS gave a history and description of a case of aortic aneurism and presented the subject.

Dr. JOSEPH BURKE read an exhaustive paper on

CONGENITAL PULMONARY STENOSIS (See page 15).

Dr. WILLIAM WARREN POTTER, president of the State Medical Examining Board, gave a brief résumé of the various efforts and events leading to the enactment of a state law regulating the practice of medicine, and the work thus far accomplished under this law. Dr. Henry R. Hopkins, president of the Medical Society of the State of New York, also discussed the subject.

All the lecturers received a hearty vote of thanks.

ABSTRACTS.

Ergoapiol in Diseases of the Female.

CHARLES H. SHEPARD, M. D., Physician to Lincoln Hospital, Durham, N. C., in an article with the foregoing title, very properly says that a deep and general interest is attached to all knowledge pertaining to the treatment of common diseases of the uterus, and the outcome of this profound and focussed interest is a vast literature. Many former theories in medicine are passing away. New medicines achieve a short-lived success, then pass to obscurity. This is especially so with medicines for gynecological diseases.

All diseases of the womb, of course, have not the same etiology nor the same pathology; therefore they should not have the same treatment. Too often the physician groups these diseases as one and gives a routine treatment. It is not enough to give anodyne medicines for dysmenorrhea, nor is it sufficient to treat alike all forms of dysmenorrhea.

The operation of curetage has a most important place in these conditions, but like other remedial agencies it has its limitations. When we curet the uterus we rid it of a pathologically obnoxious lining membrane and afford a normal membrane the opportunity to be formed.

The healthy woman with normal genitalia menstruates regularly and painlessly once a month from puberty to menopause, except this regularity be interrupted by pregnancy and lactation. Any departure from this rule constitutes an abnormality. Amenorrhea is less frequently met with than dysmenorrhea and irregular menstruation.

The most generally useful medicine in the conditions of amenorrhea, dysmenorrhea, irregular, scanty and fetid menstruation, in my judgment, is a preparation of the Martin H. Smith Company, of New York, known as ergoapiol. In the female ward of the Lincoln Hospital, I have used this medicine extensively, and it has not only rarely failed to benefit or cure, but I know no remedy with which I could replace it.

This medicine is put up as a small capsule, and combined with it are some other valuable hemagogues. What I have to say of this preparation is based entirely upon clinical experience, and a few cases are reported indicating the appropriate use of the drug and its various applicability.

Case I.—Miss W., tubercular history; menstruation very irregular, sometimes three, sometimes five weeks between periods; very painful; scanty. Ergoapiol one capsule four times a day beginning one week before the menstrual period and continued a week after the period. As a result the patient feels better in her general health; her monthly flow has been rendered painless and increased in quantity. Ergoapiol appears to have a tonic action upon the muscular fibers of the womb; not transitory but lasting.

Case II.—Endometritis. Mrs. D. has pain between periods, aggravated at periods. Leucorrhea pronounced; pains in the back; "hot flushes"; vertigo, headache. Patient would not allow an operation; highly sensitive. Several preparations were tried, but none gave relief until ergoapiol was used. Treatment was kept up for ten weeks, when she was symptomatically relieved and called herself well.

Case III.—Mrs. D., widow; aged 33; had three children; youngest ten years of age. Suffered all her menstrual life with pains in the pelvis at each period; had to keep in bed a week or more each month; paroxysms of pain were followed by leucorrhea; no anemia; womb found to be flabby and relaxed; pains

extended down thighs posteriorly. Had been treated for many years by various physicians of note, but had received only temporary benefit. Ergoapiol exhibited, one capsule three times a day, and increased at the time of the flow to four a day. After three months of this treatment her menstrual function became regular and she is entirely well.

I could prolong this list with cases that have been entirely relieved by the use of ergoapiol (Smith), but reserve them for further observation and perhaps publication.

Treatment of Hay Fever.

Means of relief for this distressing trouble are many and varied but the evidence that adrenalin fully meets the indications as a remedial agent seems to be in the ascendency. It controls the nasal discharge, allays congestion of the mucous membrane, and in that manner reduces the swelling of the turbinal tissues. As the nasal obstruction disappears, natural breathing is materially aided and the ungovernable desire to sneeze is mitigated. Adrenalin blanches the mucous membrane by vigorously contracting the capillaries, and thus reduces local turgescence.

In the treatment of hay fever the solution of adrenalin chloride should be used. This preparation is supplied in the strength of one part adrenalin chloride to one thousand parts normal saline solution, and is preserved by the addition of 0.5 per cent. chloretone. The 1-1000 solution should be diluted by the addition of four parts normal salt solution and sprayed into the nares with a "cocaine" atomiser. In the office, the 1-1000 solution may be applied in full strength. A small pledget of cotton is wrapped about the end of an applicator and moistened with a few drops of the solution (1-1000), and the visible portions of the lower and middle turbinate bodies, and the septum, are carefully and thoroughly brushed. The same application is made to the other nostril, when usually relief follows in a few moments. Should the benefit prove only partial, the 1-5000 solution may now be sprayed into both nares, and a few drops instilled into both eyes. The effect of this treatment may be expected to last for several hours, one thorough application daily being sufficient to afford complete relief in many cases.

It is also recommended that solution adrenalin chloride be administered internally in 5 to 10 drop doses, beginning ten days to two weeks prior to the expected attack. In explanation of the beneficial effect of the drug when used in this manner, the suggestion has been made that hay fever is essentially a neurosis, characterised by a local vasomotor paralysis, affecting the blood supply of the eyes, nose, face and pharynx, and occasionally of the laryngeal and bronchial mucous membranes. Adrenalin overcomes this condition, restores the normal balance in the local blood pressure, and thus aids in bringing about a cure.

BUFFALO MEDICAL JOURNAL.

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EDITOR:

WILLIAM WARREN POTTER, M. D.

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Long Live the King!

KING EDWARD of England deserves and receives the sympathy and congratulation of the whole civilised world, —sympathy at the grievous illness which laid him low on the eve of his projected coronation, and congratulation upon his recovery with practically complete restoration to health in one short month.

Probably never in the history of the world had such elaborate preparations been made to celebrate the coronation of a monarch as were planned for the ceremony that was to culminate on the 26th of June in crowning at Westminster Abbey Edward VII. and Alexandra as King and Queen of Great Britain and Ireland and Emperor and Empress of India. Probably, too, never had there been two worthier rulers than these to offer themselves for the ecclesiastical and royal ceremony that is by common consent termed a coronation.

There is something in the magnificent splendor of such a scene as was contemplated to be enacted in that classic abbey on that June morning, which appeals to the higher esthetism of a great people. There is in it nothing gross, nothing that savors of oppression, nothing vainglorious, but rather it is a culmination of all that is superb in a splendid twentieth century manhood and womanhood to do honor to the law, to good government, and to wise rulers. For the good king to be stricken down in the midst of such an event, when all the great governments of the earth had assembled their representatives to take part in the ceremonies, was indeed a sore disappointment; not so much to the brave king himself perhaps, as to the loyal, loving people who were proud to do him honor.

We have been led away from the main purpose, predominant in our mind when we began, which was to join our sympathy with that of the great English nation in its disappointment and to express the hope that King Edward VII., may be spared to a ripe old age to rule the destinies of the English people. His training has been such as to prepare him in a special manner for the duties of the crown and he may well be regarded as the foremost monarch of the age.

His Majesty is especially fortunate in the choice of his medical staff. Sir Frederick Treves stands at the forefront of the surgical profession, and it is doubtful if there is in the whole world one more competent to make the operation which he did on the King or to conduct the post-operative management. Lord Lister, too, was an excellent adviser and was just such a man as Sir Frederick could lean upon when necessary; for it must be confessed that no surgeon, however competent, would wittingly assume the entire responsibility when such an important life is at stake.

The medical side of the distinguished patient's illness was well served by Sir Thomas Smith, Sir Thomas Barlow and Sir Francis Laking. To these five great men the King owes his life, and a grateful people will not fail to appreciate their skilful management of a case that called forth all the resources of medical and surgical knowledge as well as of physical endurance. His Majesty, himself, has not failed to recognise these facts in the coronation honors he has bestowed. It remains for parliament to perform its part in relation to their pecuniary compensation.

The diagnosis of King Edward's disease was given out in the official bulletins as perityphlitis, which in this country we are accustomed to call appendicitis. We are not advised as to the precise nature of the surgical procedure taken, but we infer that its several stages were incision, irrigation, and drainage. If this is correct, the surgical lesion was probably a pericecal abscess resultant from an inflammation in the neighborhood of the vermiform appendix. The depth of the incision must have been great, owing to the thick layer of fatty tissue that covered the King's abdomen and which complicated matters not only as to surgical technic but as to the healing process, which of necessity must be slow in such an operative field. At all

events, the result shows that the surgical work was perfect and the post-operative management complete.

The King has bestowed coronation honors upon the following-named medical men: Lord Lister to be one of the first members of the Order of Merit and also a privy councillor; Sir Frederick Treves, knighted in 1901, is advanced to the rank of Baronet; Sir Francis Laking, knighted in 1893, is also advanced to the rank of Baronet; Mr. Victor Horsley, Dr. William Macewen, Dr. Isambard Owen, Dr. Thomas P. Fraser, Dr. J. Halliday Croom, Dr. William Whitla, Mr. Henry Greenway Howse, Mr. Thomas Myles, Dr. William J. Collins, Mr. Alfred Cooper and Dr. A. Conan Doyle, have all received the honor of knighthood. The Order of the Bath (civil) has been conferred upon Sir William Church and that of Commander of the Bath upon Major Ronald Ross, F. R. S., and Dr. B. Arthur Whitelegge. Medical officers of the army and navy also received similar honors.

Two Buffalo Newspapers.

THE Marian Murphy case which since the last issue of the JOURNAL has occupied much space in the newspapers and been the cause of many odd examples of what has received the appropriate title of "newspaper medicine," has been productive of much discussion regarding the various phases of criminology. The arrest of Charlie We, a chinese laundryman, on the charge of having murdered the child has been a mere incident in an otherwise notable case. Aside from the purely criminal phases, which to those who have given study to such matters is apparently one of those rarely discovered results of perversion, it has shown that Buffalo has a newspaper or two quite above the ordinary and which exhibited an unusual if not remarkable attitude in relation to the ethics of journalism.

Ordinarily, in such a case a mystery, with the outraged body of a child lying on a morgue slab and every newspaper hungry for news, with an eager public hanging on every issue, newspapers have much temptation to exceed the bounds of decency and present every detail to their readers. In this case *The Express* as soon as the child's body was found retained a physician to make an examination of the body and hand in a written report, which was done. The report was remarkably complete

considering the difficulties to be overcome, and would have made rare reading for that portion of the public which revels in the horrors of such an uncanny crime. Instead of printing the details which it had in its possession *The Express* held it as inside information and only made use of it to further the investigations of its reporters. It should be mentioned that *The News* also had the information and it too refrained from making public use of it. Here was a rare opportunity which was decently passed by.

These newspapers exhibited uncommon self-denial in the course pursued, for they could have given to their readers all the information produced by the official post-mortem examination twenty-four hours in advance of that operation, yet they refrained from doing so for decency's sake and in a spirit of cleanliness, too often lacking in the daily newspapers at the present time. Mr. Matthews and Mr. Butler are deserving of thanks for their attitude in this matter. It is a revelation, and quite a healthy one.

Reinstatement of Drs. Heath and May.

AFTER two months' suspension on an unproved accusation these two capable officers of the health department will return to duty August 2, 1902. The history of this affair shows how much easier it is to assert than to prove. That a school principal should be careless of his tongue is without excuse; such an official should be a model in word and deed. Would it not be in order now for Superintendent Emerson to administer a reprimand to Principal Knell? And, yet, perhaps the opposition to vaccination is responsible for much immoderate language; if so it is better to pity than to scold such ignorance.

The action of the health commissioner is deserving of all praise. He was somewhat overcareful, perhaps, in delaying so long, but his final statement in rendering his decision, makes the vindication of the accused physicians so complete that their prolonged suspension can be regarded with complacency. We congratulate Drs. May, Heath, and Greene on the satisfactory termination of a disagreeable trial.

In Alabama it has been decided that osteopaths must take the regular examination of the state board. The *Alabama Medical*

Journal, July, 1902, publishes the following reference to the action of the courts:

We publish in this issue of the Journal the decision handed down by the Supreme Court of Alabama, which is a very important case with reference to osteopathy. Commenting upon this decision, the *Journal of the American Medical Association* says:

By a decision of the Supreme Court, rendered June 28, in the case of Eugene Bragg vs. the State of Alabama, the decision of the lower court was affirmed. The decision affects several hundred men throughout the state, and will have the virtual effect of driving them from the state. Osteopaths are thus held to be practitioners of medicine, and must stand the examination as required by the laws of the State of Alabama for all persons entering the practice of medicine. This is another victory for the medical laws of Alabama and for the physicians who have labored for a higher medical education and reasonable qualifications to enter on the practice of medicine.

The State of New York could afford to take heed of this wise action of Alabama, which is a model state in its medical organisation and in the administration of its medical laws.

THE recent illness of King Edward has been productive of more "newspaper medicine," to which the JOURNAL has so often referred. Some of the Buffalo newspapers were amusingly inaccurate in their descriptions of the disease and operation and the tissues involved. One in particular, after digging deep into the anatomy of the abdomen with unscientific pen, made a really eloquent reference to the "corrective tissue" which was cut through in the course of the operation. For nearly three years the JOURNAL has, in common with medical journals in other cities, advocated the improvement of the daily newspaper by the employment of a member of the staff who shall be competent to deal with scientific matters and prevent such ghastly errors as are constantly creeping into the news and editorial columns. So far as we know there is not a newspaper in this country which has at its service an expert of this character.

QUEEN WILHELMINA has decorated the physicians who attended her during her recent grievous illness. Prof. Roosentein, the pathologist of Leyden University, has been promoted to the rank of Commander of the Order of the Lion of the Netherlands, and Drs. Konwer, Roessingh, and Pot have been appointed Knights of the same order.

PERSONAL.

Dr. George H. Simmons, of Chicago, secretary of the American Medical Association and editor of its journal, recently submitted to an operation for gallstone disease which resulted favorably, a large calculus obstructing the cystic duct having been removed. This apparently accounts for Dr. Simmons's ill health and from which he is now expected to recover. The Journal extends its sympathy and best wishes for his prompt restoration to health.

Colonel William H. Forwood, M. D., assistant surgeon-general, was promoted to be Surgeon-General U. S. Army, vice Brig.-General George M. Sternberg, M.D., retired June 7, 1902. General Forwood has distinguished himself in two wars and will retire September 7, 1902, after but three months' service as the head of the medical department of the army.

Colonel Robert Maitland O'Reilly, M. D., chief medical officer, Department of California, has been designated by the President to act as surgeon-general on and after the retirement of General Forwood. Col. O'Reilly was a medical cadet during the civil war and was appointed assistant surgeon in the army in April, 1867. He has seen active service on the plains and was a chief medical officer with the rank of lieutentant-colonel during the war with Spain.

Dr. R. T. Rolph, who has been in medical charge of a sanitarium in Arizona for two or three years, has returned to Dunkirk and resumed the practice of his profession. He will reside, as before, at Fredonia with offices at Dunkirk. Dr. Rolph looks in robust health, and remarked during a recent visit to Buffalo that he had been greatly benefited by his residence in the genial climate of Arizona.

Dr. John Halliday Croom, of Edinburgh, has received the honor of knighthood at the hands of King Edward VII. in consideration of his distinguished career in medicine. Sir John is an honorary fellow of the American Association of Obstetricians and Gynecologists and the association tenders him its hearty congratulations as a deserving recipient of coronation honors.

Dr. William A. Moore, of Binghamton, vice-president of the Medical Society of the State of New York, recently paid a visit to Buffalo in the interests of the society, and was the guest of Dr. Henry Reed Hopkins. Dr. Moore is taking an active part in promoting the welfare of the society of which he is the second officer, and which is rapidly approaching its centennial anniversary.

Dr. Julius Pohlman, of Buffalo, sailed July 12, to spend his vacation in Europe. Other Buffalo physicians abroad are Drs. Max Breuer, Sydney A. Dunham, Herman Mynter, Alexander M. Blair, Allen A. Jones, and Roswell Park. Dr. and Mrs. Mann will sail August 6.

Dr. M. J. Lewi, of New York, secretary of the State Board of Medical Examiners, attended the annual convocation of the University of the State of New York, at Albany, July 1 and 2, 1902, and participated in the discussions.

Dr. Roswell Park, of Buffalo, sailed early in July for a five weeks' tour in Europe. Dr. Park was the recipient of the honorary degree of Doctor of Laws from Yale University at its last annual commencement.

James Russell Parsons, Jr. Esq., secretary of the University of the State of New York, received the honorary degree of Doctor of Laws at the annual commencement of Trinity College in June.

Dr. Daniel Lewis, of New York, was elected president of the American Congress of Tuberculosis at its annual meeting held at New York, June 3-5, 1902.

Dr. John H. Grant, of Buffalo, was elected medical director of the department of New York, G.A.R. during the recent encampment at Saratoga.

OBITUARY.

Dr. James Thomas Jelks, of Hot Springs, Arkansas, died suddenly at his home in that city, June 24, 1902, aged 53 years. He was stricken down with an affection of the heart in the midst

of the greatest activity of his career as a successful physician, and his death was a shock to a large circle of friends and acquaintances throughout the country.

Dr. Jelks was born in Russell County, Ala., May 20, 1849. He served in the confederate army during the last years of the civil war, at the close of which he devoted his time to the study of medicine and graduated from the University of Nashville, medical department, in 1870. He first practised at Culloden, Ga; from there he went to Marietta, in the same state, and afterward located at St. Louis, Mo. While practising in the latter city the health of one of his family necessitated his removal to Hot Springs, which he did in 1877, where he remained until his death.

In 1883 he was appointed to a professorship of genitourinary surgery and venereal diseases in the College of Physicians and Surgeons at Chicago, which he retained until 1890, and in 1892 was appointed to the chair of gynecology and syphilology in Barnes's Medical College, at St. Louis, holding this place until his death. He was a member of numerous medical societies and published several magazine articles of scientific value. He was a member of the Southern Surgical and Gynecological Association and a Fellow of the American Association of Obstetricians and Gynecologists. He was also one of the editors of the *Hot Springs Medical Journal*. He is survived by a widow and two sons, Dr. F. W. Jelks, of St. Louis, and James T. Jelks, Jr., of Hot Springs.

Dr. William Oliver, of Penn Yan, a graduate of Geneva Medical College in 1846, died suddenly from an affection of the heart July 10, 1902, aged 79 years. He had practised his profession for more than half a century in the village where he died.

Dr. J. Wilson Wishart, of Pittsburg, a graduate of the University of Pennsylvania in 1851, died June 21, 1902, aged 73 years. Dr. Wishart was surgeon of the 140th Pennsylvania Volunteers in the civil war and was one of the chief operating surgeons of the first division, second army corps.

Dr. Eugene Grissom, the distinguished alienist formerly of North Carolina, in a state of temporary mental aberration, took his own life at his son's residence, Washington, D.C., July 27, 1902, aged 71 years. He served for twenty-one years as super-

intendent of the North Carolina Insane Hospital and achieved a national fame in the study and management of mental diseases, only to succumb to its results.

SOCIETY MEETINGS.

The American Association of Obstetricians and Gynecologists will hold its fifteenth annual meeting in the Convention Hall of the Hotel Raleigh, Washington, D.C., Tuesday, Wednesday and Thursday, September 16, 17 and 18, 1902, under the presidency of Dr. Edwin Ricketts, of Cincinnati. The manager of the Raleigh, Mr. T. J. Talty, should be addressed in relation to rooms; the secretary, Dr. William Warren Potter, 284 Franklin Street, Buffalo, should be communicated with on all other subjects pertaining to the meeting.

All physicians, and especially those in Washington and vicinity, are most cordially invited to the scientific sessions.

SCIENTIFIC PROGRAM.

The following-named papers have been offered:

1. President's address, Edwin Ricketts, Cincinnati.

2. Normal saline solutions during abdominal operations, Wm. H. Humiston, Cleveland.

3. Further notes on ovarian transplantation, Robert T. Morris, New York.

4. Surgery of the ileo-cecal valve, N. Stone Scott, Cleveland.

5. Ice following abdominal sections, Frank F. Simpson, Pittsburg.

6. Etiology and prophylaxis of traumatism of the female pelvic tract following labor, E. J. Ill, Newark.

7. Pelvic disease in the unmarried, C. L. Bonifield, Cincinnati.

8. Report of a few cases of operation for peritoneal tuberculosis with remarks, Rufus B. Hall, Cincinnati.

9. Suppression of urine as a post-operative condition, T. J. Crofford, Memphis.

10. Occipito-posterior positions, J. M. Duff, Pittsburg.

11. Intestinal anastomosis, J. A. Lyons, Chicago.

12. Retained placenta due to uterine fibroids, with cases, M. A. Tate, Cincinnati.

13. Hydramnion with report of a case, E. F. Fish, Milwaukee.

14. (*a*) Personal experiences in the use of the angiotribe: (*b*) Two fatal cases of tetanus, following abdominal section. Walter B. Dorsett, St. Louis.

15. A second contribution to the treatment of gastric ulcer. Henry Howitt, Guelph.

16. Hemorrhagic cysto-sarcomata of the ovary: their infectious character, J. B. Murphy, Chicago.

17. General consideration of drainage in abdominal and pelvic surgery, Joseph Price, Philadelphia.

18. Surgical relations that the appendix region or zone bear to pelvic suppuration and operative complications, Joseph Price, Philadelphia.

19. Infantile intestinal diverticula, Joel W. Hyde, Brooklyn.

20. Myomectomy vs. hysterectomy, C. C. Frederick, Buffalo.

21. Anterior transplantation of the round ligaments for uterine displacements, A. H. Ferguson, Chicago.

22. The cases of peritonitis which recover after operation, Wm. E. B. Davis, Birmingham.

23. Dystocia following ventrofixation of the uterus, William H. Wenning, Cincinnati.

24. Surgery of the ureters, C. R. Dudley, St. Louis.

25. Curetage in streptococcus infection of the uterus, D. Tod Gilliam, Columbus.

26. A new operation for displaced kidney with report of cases, Charles A. L. Reed, Cincinnati.

27. Cancer of the large intestines with special reference to Mikulicz's method of resection, M. Stamm, Fremont, O.

28. A short review of the advances made in intestinal surgery, James F. W. Ross, Toronto.

29. Ectopic pregnancy, H. D. Ingraham, Buffalo.

30. Unusual cases of appendicitis, Miles F. Porter, Fort Wayne.

31. Pelvic abscess and its treatment, H. E. Hayd, Buffalo.

32. Abdominal section during pregnancy, J. H. Carstens, Detroit.

33. Ruptured pus tubes, Charles G. Cumston, Boston.

34. Title to be announced, H. O. Pantzer, Indianapolis.

35. Gastrectomy with report of two cases, A. Vander Veer, Albany.

36. Four cases illustrating the difficulties of diagnosticating appendicitis, William Wotkyns Seymour, Troy.

37. The vaginal route for operations on the uterus and appendages, with cases, Jos. H. Branham, Baltimore.

38. The management of cases of emergency arising from rupture in ectopic pregnancy, A. P. Clarke, Cambridge.

39. Some unsettled questions in the surgery of the appendix, John Young Brown, Jr., St. Louis.

40. Deciduoma malignum, with report of a case, L. S. McMurtry, Louisville.

41. Relationship of the colon to abdominal tumors, James F. Baldwin, Columbus.

42. Some problems in exploratory laparatomy, Walter B. Chase, New York.

43. Title to be announced, L. H. Dunning, Indianapolis.

44. Extirpation of the gall-bladder, through the lumbar incision; with report of a case, W. P. Manton, Detroit.

The Medical Society of the County of Chautauqua held its annual meeting at the Hotel Atheneum, Chautauqua, N. Y., Tuesday, July 8, 1902. The following program, prepared by the secretary, Dr. Charles A. Ellis, was observed: President's address, N. E. Beardsley, Dunkirk; Some ocular symptoms in general diseases, Geo. E. Blackham, Dunkirk; Presentation of cases by Wm. Seaman Bainbridge, New York: (1) fracture of the neck of the humerus; (2) fibromyomata uteri—hysterectomy; (3) fibromyomata uteri—myomectomy; (4) prostatic hypertrophy—patient aged 75 years, operation, cured; Immunity, Henry R. Hopkins, president of the Medical Society of the State of New York, Buffalo.

The New York State Medical Association—fourth district branch—held its eighteenth annual meeting at Hotel Atheneum, Chautauqua, N. Y., July 23. The following was the program: President's address, Chas. A. Wall, Buffalo; Congenital narrowness of the aortic system, Joseph Burke, Buffalo—discussion, Chas G. Stockton, DeLancey Rochester, Buffalo; The broad therapeutic application of ergot, Alfred T. Livingston, Jamestown—discussion, H. D. Ingraham, Buffalo; The differential diagnosis of diseases of the hip-joint, Wisner R. Townsend, New York—discussion, Wm. C. Phelps, Buffalo, Wm. M. Bemus, Jamestown; Fecal fistula, Frederick Holme Wiggin, New York—discussion, Eugene A. Smith, Buffalo, Marcell Hartwig, Buffalo; Eczema,

Grover W. Wende, Buffalo—discussion, Alfred E. Diehl, Buffalo.

The Fourteenth International Congress of Medicine will be held in Madrid, Spain, from April 23 to 30, 1903, under the patronage of their majesties, the King of Spain and the Queen-mother. The president of the congress is Professor Julian Celleja y Sanchez, the general secretary is Dr. Angel Fernandez-Caro, and the general treasurer is Professor José Cómez Ocaña. The preliminary statement of regulations and program has been issued, and it announces that members of the congress will be physicians, pharmacists, dentists, veterinary surgeons, and other persons working in branches of medical science, both Spaniards and foreigners, who have entered their names and paid their subscriptions. Other persons who possess scientific or professional titles, and who wish to take part in the work of the congress, may share in it under the above conditions. Communications should be accompanied by a short abstract, which will be printed and distributed among the members of the congress and should be addressed to J. H. Huddleston, secretary, American committee, 126 West 85th Street, New York City.

The American Electo-therapeutic Association will hold its annual meeting at the Hotel Kaaterskill, Catskill Mountains, New York, September 2, 3 and 4, 1902.

The National Association of United States Pension Examining Surgeons was organised at Saratoga Springs, June 9, 1902.

The meeting at Saratoga was successful, a large number of enthusiastic examining surgeons were present, and officers were elected for the coming year. Several interesting papers were presented and by special invitation, Dr. J. F. Raub, Medical Referee of the U. S. Pension Bureau, read a paper full of valuable suggestions concerning the work of all pension examining surgeons. This, by vote of the association, is to be printed and sent to examining surgeons throughout the country.

During the coming year a vigorous and earnest attempt is to be made to interest every pension examining surgeon in the United States in this organisation, and to induce as many as possible to join it. Inasmuch as these number about 4,500 physicians, it is evident that the association is probably destined

to become an important factor among medical societies in the United States.

The officers elected for the ensuing year are: president, Wm. A. Howe, Phelps, N.Y.; vice-presidents, Wm. H. Hall, Saratoga Springs, N.Y., Cyrus L. Stevens, Athens, Pa., Charles James Fox, Willimantic, Conn., G. Law, Greeley, Col.; secretary, Wheelock Rider, Rochester, N.Y.; treasurer, Charles H. Glidden, Little Falls, N.Y.

The executive committee is made up as follows: The president, *ex-officio*; F. W. Firmin, Findlay, O.; John VanRensselaer, Washington, D.C.; J. Sutcliffe Hill, Bellows Falls, Vt.; Warren E. Anderson, Pensacola, Fla.; Henry Allers, Newark, N.J.; J. H. Maxwell, Newton, Ill.; G. Lane Taneyhill, Baltimore, Md.; and Joseph E. Jones, Desoto, Mo.

All members of pension examining boards and all expert examiners are eligible for membership, and any such may become a member by sending his name and the dues for one year ($1.00) to the treasurer, Charles H. Glidden, M.D., Little Falls, N.Y.

The Buffalo Academy of Medicine.—All members are invited and urged to contribute to the program for the session of 1902-1903, and to communicate with the officers, as announced below: Section of medicine—chairman, A. E. Woehnert; secretary, Julius Ullman, 400 Franklin Street. Section of surgery: chairman, Henry Rooth: secretary, Marshall Clinton, 466 Franklin Street. Section of obstetrics: chairman, L. Schroeter; secretary, Henry Stadlinger, 274 Swan Street. Section of pathology: chairman, Irving P. Lyon; secretary, Jacob S. Otto, 394 Franklin Street. Section of ophthalmology: chairman, E. E. Blaauw; secretary, F. H. Millener, 724 Main Street. The council would appreciate the assistance of members in securing the services of out-of-town men of note in the profession to participate in the program. Herman E. Hayd, president; F. W. McGuire, 1540 Main Street, secretary.

The Buffalo Academy of Medicine, section of ophthalmology, otology, laryngology and rhinology has recently issued the following special circular:

Sufficient interest in this section has not been evidenced in the past by the support extended to it by members of the academy, and it was, perhaps, due to a misconception that the

meetings would only be of interest to those who devote themselves to these branches. Therefore, in order that the meetings of this section, for the coming year, may be made highly successful, we ask you to send us the title of some subject, falling within the limits of the section, in which you are particularly interested. It is very important that we should have the sympathy and active support of every member of the academy. Your kind attention and an early reply, will be much appreciated. (Signed) Edmund E. Blaauw, chairman; George F. Cott, secretary.

COLLEGE NOTES.

The Denver College of Medicine and the Gross Medical College announce that they have united under the name of the Denver and Gross College of Medicine, medical department of the University of Denver.

The college will be located in the Haish building, corner Fourteenth and Arapahoe Streets, Denver, Col., heretofore the home of the Denver College of Medicine.

The teaching force will embrace the faculty and instructors of each school under the management of a board of trustees selected from each of the schools as follows: Dr. E. C. Rivers, president of the board; Drs. Thomas H. Hawkins, E. J. A. Rogers, S. G. Bonney, C. K. Fleming, W. A. Jayne, Robert Levy, Leonard Freeman and Henry Sewall.

The facilities and equipment of each school will be utilised in the new college and very material additions will be made thereto with the result that the college will offer a four-year graded course consisting of four sessions of eight months each. The laboratories in all departments are modern and will be greatly enlarged and thoroughly equipped.

The first two years of the course will be devoted to fundamental principles of the science of medicine and to laboratory work, and the last two years to the study of the practical branches of medicine and surgery, the application of laboratory methods in diagnosis and to clinical work by the students, which will form a prominent feature of the course.

The University of Buffalo, Medical Department, has issued its annual announcement while these pages are on the press. From it we learn that the 57th regular session will begin Monday, September 29, 1902.

BOOK REVIEWS.

GENITOURINARY DISEASES AND SYPHILIS. For students and practitioners. By HENRY H. MORTON, M. D., Clinical professor of Genitourinary Diseases in the Long Island College Hospital; Genitourinary Surgeon to the Long Island College and Kings County Hospitals and the Polhemus Memorial Clinic. Illustrated with half-tones and full-page color plates. Pages xii—372. Philadelphia: F. A. Davis Co., 1902. [Price, $3.00 net, delivered.]

In this volume the author has taken up and considered the subjects in a way that leads one to think that he has had considerable clinical experience and been a close observer; yet, nevertheless, he must be differed from upon a few points that although they may be considered trivial are very important as regards the patient's welfare. In the treatment of chronic specific urethritis the author still clings to the use of the catheter. It is known that a catheter always produces irritation; why not then dispense with it when the same results are obtained without it? As silver nitrate always acts as an irritant for the first few hours, even in dilute solutions, Morton's readers would reach better and quicker results if he had advised commencing the treatment of either simple or chronic specific urethritis with a 1-15000, instead of a 1-4000 solution.

Mention should have been made of those very important little agents, leeches, in the treatment of acute prostatitis, for with these resolution is brought about in a few hours instead of taking days as under the advised method. Such an important subject as chronic prostatitis should have been considered more fully and possibly more clearly.

The chapter on stricture is well written and careful observers will readily agree that the advice that it is always best to dilate, when results can be obtained, rather than to cut, is sound.

Morton, we think, should have gone more deeply into the subject of diet and constitutional habits as predisposing factors in the production of stone, especially the oxalic and uratic varieties. There is no doubt that malassimilation is accountable for a goodly number of all urinary calculi of the forms mentioned. Only two lines are given to the consideration of the urine as a diagnostic agent in the detection of stone. It strikes the reviewer that instead of dilating upon diagnostic symptoms well known and published for years, that methods which are comparatively new, yet of most positive value, should have received more attention than the author has given them.

Inflammatory diseases of the bladder are carefully considered, yet a few recent findings, and now acknowledged to be almost pathognomonic, medically and symptomatically, have not been mentioned.

In speaking of pyelitis, Morton seems to have lost sight of the fact that involvement of the kidney pelvis often develops suddenly, for instance during an acute attack of gonorrhea. In this connection the author says: "Pain is rarely a prominent

symptom unless stone be present," whereas it is in reality the most important symptom, is very severe, is located in the affected side and directly over the kidney. Clumping of the pus cells should have been referred to as seen with the microscope in this condition, for unless the urine is very opaque this one point is far more important than any information that can be obtained from the cystoscope.

Considerable space is given to syphilis, the subject being well delineated and in a manner that shows careful study of many cases.

The author closes the book with a chapter on sexual diseases. These subjects are not considered exhaustively yet they give a clear working basis for the general practitioner or student. On the whole, the work may be considered practically up to date and in almost every part it gives the reader a good understanding of the diagnosis and treatment of disease of the genitourinary organs. J. H. D.

DISEASES OF THE NOSE, PHARYNX AND EAR. By HENRY GRADLE, M. D. Professor of Ophthalmology and Otology, Northwestern University Medical School, Chicago. Octavo of 547 pages, profusely illustrated, including two full-page plates in colors. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $3.50 net.]

The rapid strides made in the topics of medicine treated of in this book within the last few years, toward perfected principles and practice, have been pointed to over and over again. This work further emphasises the fact in an incisive way. The author has taught in these branches for a quarter of a century and presents his personal experiences in a clear and concise fashion.

The anatomy of the naso-pharynx is admirably depicted in text and strongly illustrated in engravings. No better pictures of the upper air tract have ever been published in a textbook. In handling diseases of this region the author has presented many of the questions in an original manner, and gives information not usually accessible.

The work is divided into two parts, or books as they are termed, the first being devoted to the consideration of diseases of the nasal passages and pharynx; and the second is set apart to discussion of diseases of the ear. The methods of examination, with all the various instruments of value are described and the author's technic is to be commended. Diseases of the sinuses, especially the maxillary, are given appropriate space and are treated with the most modern scientific methods.

We are specially attracted to the chapter on retronasal catarrh, because the affection is so common and is very inadequately described or detailed in the usual textbooks. This author gives it due importance, but he confesses that there is no known treatment that can effect its cure. It is to be hoped that this will not long be so.

Infectious diseases of the upper air tract,—diphtheria, syphilis, tuberculosis,—are set forth most interestingly as well as scien-

tifically and their exposition bespeaks a thorough acquaintance with their clinical manifestations and with their essential management. Tumors of the nose and pharynx are also well handled, and appropriate operations are advised and described. The septum and turbinals, the special field of the amateur, are given, in their description here and there is a proper pathological place and their importance in a rhinological sense is duly considered.

The second book takes up the anatomy and physiology of the ear, discusses the etiology of ear disease, and then proceeds to describe symptoms and treatment, chapter by chapter, until a most complete monograph of the subject is written. The general physician should read the chapters relating to diseases of the middle-ear, because they are fresh, recent, and will aid him in the important early detection of these affections. The whole subject of ear disease is dealt with masterfully and is a credit to the author as well as a real contribution to literature. Finally, the entire treatise contains so much to commend and so little to criticise, that we yield to it our unqualified endorsement as one of the best of the recent works on these diseases.

THE MENTAL STATE OF HYSTERICALS. A Study of Mental Stigmata and Mental Accidents. By PIERRE JANET, Litt. D., M. D., Professor of Philosophy at the College Rollin. With a preface by Professor J. M. Charcot. Translated by Caroline Rollin Corson. Octavo, pp. 553. New York and London: G. P. Putnam's Sons. 1902.

Charcot had the happy faculty of surrounding himself with young men who like himself were strongly imbued with medical science and medical philosophy. Of the former such names as Marie, Raymond, Féré, Brissau and Joffroy, and of the latter, Pierre Janet and Tourette, are the best known and their writings bear the stamp of the master's mind behind them all.

It remained for Janet to produce a work after Charcot's own heart, a subject which both gave unusual attention and treated with unusual skill. Up to Charcot's time hysteria was an unknown field full of superstition and ignorance; gradually he converted it into a field full of the highest type of research and thought and Janet's work of today is only a sample of what that field has brought forth.

The author has divided the work into two parts, part I. dealing with mental stigmata; part II. with mental accidents. Hysteria, according to Briquet, is a general disease which modifies the whole organism. If it disturbs nutrition and all the physiological functions, it disturbs also the psychological phenomena, which are among the functions of the brain. It is these psychological perturbations which the author proposes to examine in this work.

The anesthesias or insensibilities, so common among hystericals, are dealt with very thoroughly by the author and their explanation is left a blank. The author then considers the amnesias, the abulias, motor disturbances and modifications of

the character in hystericals. These chapters bear evidence of close study and sound reasoning. The mental accidents comprise the grosser hysterical manifestations as somnambulism attacks, delirium, suggestion and subconscious acts and fixed ideas.

The concluding chapter deals with hysteria from a psychological point of view and the author shows it to be a malady by representation. "No definition of hysteria has ever been given and never will be given" says Lasèque, and the author wisely refrains from attempting one—although he gathers up his conclusions as follows: Hysteria is a form of mental disintegration characterised by a tendency toward the permanent and complete undoubling of the personality.

The author found that heredity plays a very prominent part in hysteria; and a critical age—not exactly the physical age of puberty so much as the moral puberty, which comes somewhat later and plays such a preponderant rôle.

To the neurologist, alienist, psychologist and medical philosopher, the book is invaluable, while to the progressive physician it will reveal a great light on this important subject.

The translation has been excellently rendered by Mrs. Corson of Cornell University and its English is as finished as is the subject matter in its original. W. C. K.

A System of Physiological Therapeutics. A Practical Exposition of the methods, other than drug-giving, useful in the prevention of Disease and in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College; Physician to the Philadelphia Hospital and to the Rush Hospital for Consumption, etc. In eleven 8vo volumes. American, English, German and French authors. Volume IX. Hydrotherapy, Thermotherapy, Heliotherapy and Phototherapy. By Dr. Wilhelm Winternitz, Professor of Clinical Medicine in the University of Vienna; Director of the General Polyclinic in Vienna; Assisted by Dr. Alois Strasser, Instructor in Clinical Medicine at the University of Vienna, and Dr. B. Buxbaum, Chief Physician of the Hydrotherapeutic Institute in Vienna. And Balneology and Crounotherapy by Dr. E. Heinrich Kisch, Professor in the University of Prague; Physician at Marienbad, Spa. Translated by Augustus A. Eshner, M. D., Professor of Clinical Medicine in the Philadelphia Polyclinic, etc. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price for the set complete, $27.50 net.]

A scientific treatise upon the subjects embraced in this volume has been needed for some time past. There has been enough literature afloat, but it has partaken for the most part of the nature of commercialism. Now, we have something that can be relied upon as a substantial guide in the management of the worn and invalided, — the neurasthenic and exhausted,—who come to us for advice rather than medicine. At any rate these groups of patients need, pretty generally, the kind of treatment set forth in this book, more than that which is obtained at the drug shop.

It seems remarkable that such valuable therapeutic means as are described in this work should be left so largely to

the empiric, and that patients who most need these means can usually find them in "institutions" or sanatoria managed by so-called physicians who, to say the least, have no claim to the title in a scientific sense, and who are interested solely in the size of the bank accounts of their customers. The time has come for a change, and educated physicians who are trained in the best science the period affords, must be encouraged to take the management of infirmaries where all the various methods of treatment set forth in this book can be obtained at reasonable price and applied under a scientific eye.

We trust this work will find its way into the hands of every physician who possibly may be called upon to prescribe for those who need these methods of treatment.

A Handbook of Appendicitis. By A. J. Ochsner, M. D., Professor of Clinical Surgery, College of Physicians and Surgeons, Medical Department of the University of Illinois; Surgeon of the Augustana Hospital, etc. Pp. 182. Illustrated. Chicago; G. P. Englehard & Co. 1902. [Price, $1.00 net.]

This well written and handsomely printed monograph is a valuable addition to the literature of appendicitis. It embraces the important features of the subject from anatomy to post-operative treatment,—everything essential to the masterful conduct of the disease.

In ten lucid chapters of exceptionally clear, pure and simple English, Ochsner tells the story of a disease that is of constantly increasing importance, and though much has been written upon it, the last word has by no means been said. It should be studied in all its aspects by every general practitioner of medicine, that he may know how to act in the sudden presence of the malady, and this brochure of Ochsner will help him vastly in making up his judgment. Its size is convenient for the pocket, hence may be made a constant companion. A bibliography and index, both of great moment, close a book that is deserving of the highest praise.

Chemical Pathology in its Relation to Practical Medicine. By C. A. Herter, M. D., Professor of Pathological Chemistry in the University and Bellevue Medical College, New York, etc. In one 12mo volume of 454 pages. Philadelphia and New York: Lea Brothers & Co. 1902. [Cloth, $1.75 net.]

For many years Dr. Herter has been engaged in researches in chemical pathology and in his published articles in current literature has given some idea of the scope of his work. The present volume is a collection of those papers arranged in the form of lectures and were delivered before the students of the University and Bellevue Hospital Medical College, in New York, the past winter. They show that the instincts of a practical clinician have guided a master hand in the treatment of such topics as: Clinical defences of the organism against disease; Food-stuffs and their fate in the body in health and disease;

Chemical pathology of gastric and intestinal digestion; Chemical pathology of hepatic disease; Diabetes; Starvation; Undernutrition and obesity. Other chapters deal with the iron of the food and its fate in the body, alcohol, the organic acids of the food, tea and coffee, excessive fermentation and putrefaction in the digestive tract.

Dr. Herter is an accepted authority in pathology and chemistry and is thoroughly well equipped for the task of selecting the new and perhaps revolutionary facts discovered in this field of investigation and demonstrating their application and usefulness in the broader realm of daily practice.

The work will prove interesting reading to those who desire to know what nature does in her dietary. It is a work of exceptional value and timely interest.

Lea Brothers & Co. have made the work durable and pleasing to the eye. W. C. K.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued monthly under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume IV. Gynecology. Edited by Emilius C. Dudley, A. M., M. D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago. With the Collaboration of William Healy, A. B., M. D. 12mo, pp. 212. Illustrated. Chicago: The Year Book Publishers. 1902. [Price, $1.25.]

The editor of this volume, Dr. Dudley, has become one of the most advanced, painstaking and skilful of American gynecologists. It would be an impossibility to attach his name in any way to a gynecological treatise that did not possess merit.

We regard this number of the Practical Medicine Series as one of the most valuable yet issued. The material has been carefully selected with reference to exhibiting the most noteworthy contributions to gynecological literature made during the year 1901. The book is of special value to the advanced student and junior physician, though it is full of interest to the more experienced gynecologist,—even the specialist may derive much benefit from its careful study. Some of the illustrations are exceptionally fine, while all are well chosen and afford material aid to the study of the text.

A PRACTICAL TREATISE ON SMALLPOX. Illustrated by colored photographs from life. By GEORGE HENRY FOX, M.D., Consulting Dermatologist to the Health Department of New York City. With the Collaboration of S. D. Hubbard, M. D., S. Pollitzer, M. D. and J. H. Huddleston, M. D. In two parts, atlas form. Philadelphia and London: J. B. Lippincott Co. 1902. [Price, $3.00.]

The author of this work most truthfully remarks that when a physician is called to a case of suspected smallpox, he confronts a grave responsibility. A mistake made here may cost lives and treasure—to say nothing of reputation, which once lost is not easily regained.

The object of this treatise is to equip the physician with just the information needed to avoid such direful mistakes as are made all too frequently in the differential diagnosis of the early stages of smallpox. It is at once practical and elaborate—practical in its simplicity and conciseness of its text, elaborate in its illustrations, many of which have never been equaled and none excelled. It is, the author believes, the first presentation of the eruption in each of its successive stages, the plates in color tints being reproduced from life. Dr. Fox is experienced with the camera and his collection of photographs, showing all manner of skin diseases, is famous among dermatologists. Those used in this work are rare specimens, obtained sometimes under stress, and present the disease in its various stages, the day of the eruption being given in the legends, and altogether makes the most complete exposition of smallpox yet attempted. It is a timely contribution to the subject and ought to do good service in preventing the spread of a loathsome disease that should not be permitted to exist in these enlightened days when sure prevention is at hand.

THE DIAGNOSIS OF SURGICAL DISEASES. By DR. E. ALBERT, late director and Professor of the first Surgical Clinic at the University of Vienna. Authorised translation from the eighth enlarged and revised edition, by Robert T. Frank, A. M., M. D. Octavo, pp. 427. With 53 illustrations. New York: D. Appleton & Co. 1902. [Price, cloth, $5.00.]

This work appears for the first time in English, though it long has been popular with those who read it in the native tongue of the author. It considers a subject of great moment to every surgeon, or those who practice surgery even occasionally, and it takes conditions up as they are met with clinically or at the bedside. Albert has had the supreme advantage of obtaining his material from the great clinics of Vienna, where there is practically no limit to it, and where surgery is seen at its best.

A treatise on medical diagnosis is no novelty, but one exclusively devoted to the diagnosis of surgical diseases and injuries is unique. The language is clearly expressive of the author's meaning, and there has been no attempt to discuss theories; but the several diseases possessing similarity in symptomatology are grouped and their similars described and differentiated.

Many of the clinical evidences of disease are graphically described and a large number of cases are presented and analysed. Here is an example:

> An old gentleman fractured his thigh while out walking, but not at the neck of the femur as is usually the case with old people. When v. Dumreicher was called in, he noticed a strabismus of minor degree. He immediately followed up the symptom, and on questioning found the strasbismus had existed fourteen days. He diagnosticated fracture due to carcinomatous degeneration of the bone, and also carcinoma at the base of the skull. Autopsy confirmed the diagnosis. The primary focus was a carcinoma of the parotid.

In a chapter devoted to the consideration of thoracic tumors the author describes the differentiation of those having surgical importance in a manner especially interesting, and likewise in a subsequent chapter handles abdominal tumors in a similarly instructive and engaging fashion. As might be anticipated in such a work there is little attempt at illustration, though a few drawings are introduced that serve a good purpose. We expect to see, some day, an American treatise of similar character profusely illustrated. Meanwhile, there is no better work than this upon a similar topic, and it will prove of great aid to every physician in the country who must needs practise surgery.

INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, etc. Edited by HENRY W. CATTELL, A. M., M. D., of Philadelphia, with the collaboration of John B. Murphy, M. D., of Chicago: Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M. D., of Paris; Thomas G. Morton, M. D., of Philadelphia; J. W. Ballantyne, M. D., of Edinburg, and John Harold, M. D., of London. Volume I. Twelfth series. 1902. 84 illustrations, with 3 colored plates. Philadelphia: J. B. Lippincott Co. [Price. cloth, $2.00 each; half-leather, $2.25 each.]

The excellent standard established in the beginning of the publication of these clinics is not only still maintained, but is improved upon year by year and number by number. The present volume is particularly noticeable in the variety and excellence of its subjects and in the number and quality of its illustrations. The contents include lectures on therapeutics, medicine, surgery, obstetrics, and diseases of the ear; also two biographical sketches of living medical men,—S. Wier Mitchell and John A. Wyeth,—and a final section called progress of medicine. This latter is a review of the literature of note during the year 1901.

The book, as a whole, cannot fail to interest the practising physician if he would keep pace with the events in his profession that are of importance.

MANUAL OF CHILDBED NURSING, WITH NOTES ON INFANT FEEDING. By CHARLES JEWETT, A. M., M. D., Sc. D., Professor of Obstetrics and Diseases of Women in the Long Island College Hospital. 12mo, pp. 84. Fifth edition, revised and enlarged. New York: E. B. Treat & Co. 1902. [Price 80 cents.]

This excellent manual is one of the clearest, most concise and best of the several brochures pertaining to nursing in the lying-in chamber. It contains scarcely a superfluous word, yet everything of importance pertaining to childbed nursing can be found between its covers. The author is one of the foremost teachers and his experience has been practically applied in the making of this

book. It should be placed in the hands of every mother, and every obstetric nurse needs it, as a matter of course.

PROGRESSIVE MEDICINE, Vol. II., June, 1902. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 440 pages, 28 illustrations. Philadelphia and New York: Lea Brothers & Co. [Per annum, in four cloth-bound volumes, $10.00. Per volume, $2.50, by express prepaid to any address.]

The subjects dealt with in this volume are surgery of the abdomen, including hernia, by William B. Coley; gynecology, by John G. Clark; diseases of the blood and ductless glands, the hemorrhagic diseases, and the metabolic diseases, by Alfred Stengel; and ophthalmology, by Edward Jackson.

The surgery of the abdominal viscera is espcially interesting, containing as it does the later methods of dealing with the kidney, liver and pancreas. The gynecological field, too, has been well covered, and in particular has cancer of the uterus received some attention. The great importance of this topic is being impressed upon the profession in every recent publication relating to it, and in the brief consideration given it here, we find reflected the most advanced views.

Diseases of the blood, as might be expected, are most ably and thoroughly discoursed upon and many useful hints in pathology and diagnosis are advanced. The section on ophthalmology will prove of interest to specialist and generalist. The entire volume is a condensation of progress that deserves and ought to receive approbation.

BOOKS RECEIVED.

A Manual of Instruction in the Principles of Prompt Aid to the Injured. Including a Chapter on Hygiene and the Drill Regulations for the Hospital Corps, U.S.A. Designed for Military and Civil Use. By Alvah H. Doty, M. D. Health Officer of the Port of New York. Fourth edition, revised and enlarged. New York: D. Appleton & Co. 1902.

Mother and Child. By Edward F. Davis, A. M., M. D., Professor of Obstetrics in the Jefferson Medical College; Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic. Duodecimo, pp. 264. Philadelphia: J. B. Lippincott Co. 1902. ($1.50)

A Treatise on Diseases of the Skin. For the use of Advanced Students and Practitioners. By Henry W. Stelwagon, M. D., Ph. D., Clinical Professor of Dermatology, Jefferson Medical College and Woman's Medical College, Philadelphia; Dermatologist to the Howard and Philadelphia Hospitals. Handsome octavo of 1125 pages, with 220 text-illustrations, and 26 full-page lithographic and half-tone plates. Philadelphia and London: W. B. Saunders & Co. 1902. (Cloth, $6.00 net; Sheep or Half-Morocco, $7.00 net.)

Saunders's Medical Hand-Atlases. Atlas and Epitomé of Abdominal Hernias, By Privat docent Dr. Georg Sultan, of Göttingen. Edited, with additions, by William B. Coley, M. D., Clinical Lecturer on Surgery, Columbia University (College of Physicians and Surgeons) With 119 illustrations, 30 of them in colors, and 277 pages of text. Philadelphia and London; W. B. Saunders & Co., 1902. [Cloth, $3.00 net.]

Medical and Surgical Report of the Presbyterian Hospital, New York. Volume V. January, 1902. Edited by Drs. Andrew J. McCosh and W. Gilman Thompson.

The Roller Bandage. By William Barton Hopkins, surgeon to Pennsylvania Hospital and to the Orthopedic Hospital and Infirmary for Nervous Diseases. 12mo, pp 178. Fifth edition, revised. Philadelphia: J. B. Lippincott Company. 1902. [Price, $1 50.)

Vaughan and Novy on Cellular Toxins. A treatise on Cellular Toxins, or the Chemical Factors in the Causation of Disease. By Victor C. Vaughan, Ph.D., M.D., Professor of Hygiene and Physiological Chemistry, and Frederick G. Novy, M. D., Junior Professor of Hygiene and Physiological Chemistry in the University of Michigan. New (4th) edition, revised and enlarged. In one 8vo volume of 480 pages, with six illustrations. Lea Brothers & Co., Philadelphia and New York. 1902. [$3 00 net.]

The Practical Medicine Series of Year Books. Ten volumes. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VII. Materia Medica and Therapeutics; Preventive Medicine; Climatology; Forensic Medicine. By George F. Butler, Ph.G., M D, Henry B. Favill, A.B., M.D., Norman Bridge, A.B., M.D., Harold N. Moyer, M.D. 12mo, pp. 279. Chicago: The Year Book Publishers. 1902. [$1.50. Entire series, $7.50.]

The Johns Hopkins Hospital Reports. Volume X., Nos. 3, 4 and 5. Baltimore: The Johns Hopkins Press. 1902.

LITERARY NOTES.

THE *Medical Book News* is the title of a bimonthly brochure issued by P. Blakiston's Son & Company, of Philadelphia. It is devoted to the literature of medicine and allied sciences, and its object, as announced by the publishers, is to furnish information of use to physicians and others in selecting and purchasing such books of professional and scientific nature as they need. It will give descriptions of important books, reviews from medical magazines, news items, lists of the most recent American and English books of all publishers, and of new books on special subjects. The first number is dated July, 1902, and is a small octavo, beautifully printed in double columns. The publishers propose to send it without charge to all who are interested in its purposes, a liberality for which they certainly deserve all praise.

THE *Old Dominion Journal of Medicine and Surgery* is the name of a new periodical published at Richmond and edited by Dr. Greer Baughman, assisted by Dr. A. B. Greiner. It is the official organ of the alumni society of the Medical College of Virginia. The college is the thirteenth oldest medical school in the United States and such a foundation ought to insure the successful career of the magazine, which we confidently bespeak.

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ORIGINAL COMMUNICATIONS.

The Early Diagnosis of Pulmonary Tuberculosis.[1]

BY SILVIO VON RUCK, M. D., Asheville, N. C.,
Laryngologist and Associate Medical Director of the Winyah Sanatarium.

EVERY intelligent physician seeks primarily to determine the nature of the affection with which he has to deal in a given case before deciding upon this, that, or the other therapeutic means for its amelioration or cure. He realises also, that in many instances, the earlier the diagnosis is made the greater are the prospects of obtaining favorable results from treatment, and he further knows that sometimes, if prompt measures are not resorted to, the patient's chances for recovery may be forfeited. We are all quick to acknowledge the force of these truths in acute infectious diseases like diphtheria, and tetanus, for example, as well as in various other affections but unfortunately it must be admitted that not every practitioner so thoroughly appreciates the vital importance of an early diagnosis in pulmonary tuberculosis.

It is a well-established fact that pulmonary tuberculosis, in its early stages, is a very curable affection, but there does not as yet exist a conformity of opinion as to just what constitutes the truly early stages.

It is the purpose of this paper to consider the more incipient changes which occur in the lungs in relation to the signs and symptoms to which they give rise, and to distinguish this period of the disease from later ones in which the diagnosis is readily made, in which destructive alterations are in process or have already taken place, and in which the affection is more properly termed phthisis or consumption.

1. Read at the meeting of the North Carolina State Medical Society at Wilmington, June 10-14, 1902.

Various writers describe a "pretuberculous stage"[1] a prodromal period, so to speak, during which the prospective subject of pulmonary tuberculosis presents slight symptoms which often seem so inconsequent as to pass unnoticed or to be ignored. This term "pretuberculous" is both a misleading and a most unfortunate one, and the sooner it is dropped the better, for not only is there in reality no such thing as a "pretuberculous stage," inasmuch as until actual infection has occurred tuberculosis can have no existence in the individual, but the slight manifestations which have been grouped under this head really comprise the earliest symptoms of the disease itself.

This is the golden opportunity, the time of all times to make the diagnosis, because now the patient's prospects for recovery are most excellent; indeed, they are far better than they can ever be at any subsequent period.

But why is this opportunity not more frequently recognised and taken advantage of by the physician? In the first place, because of the apparent insignificance of the symptoms which attend the onset of the truly early stage, and which the patient is prone to neglect as of not sufficient importance to warrant professional consultation. The malaise, loss of appetite and slight decline in weight which he may experience, he readily attributes to all sorts of supposed minor aliments, for he does not know that these symptoms may mean the advent of so serious a disease as tuberculosis. For the patient's neglect of himself the profession is not responsible, but we may perhaps do something toward educating the public to the realisation of the fact that such manifestations are often worthy of a more earnest consideration and that an investigation as to their cause is always justifiable. While it is, of course, true that the cause may, in numerous instances, prove an innocent one, a careful investigation can, on the one hand, do no harm, whereas on the other, neglect may lead to fatal consequences in the end. Again, it is the general practitioner, the family doctor only, and not the specialist, to whom opportunity is afforded at all frequently to recognise these suggestive symptoms.

The knowledge that tuberculosis has existed in a family, the casual observation that certain members of a family appear less robust than others, that one child is retarded in its physical growth and development as compared with its brothers and sisters, and the like, should all serve as warnings to render him

1 H. P. Loomis, Transactions Am. Clim. Association, Vol. XIV., 1898, p. 49.

alert and watchful to detect the very earliest indications of a tuberculous affection. In this connection it seems almost superfluous to speak of the advisability of subjecting to repeated examinations, from time to time, the relatives of phthisical subjects, whose close relations in nursing and caring for the invalid and in whom mere domiciliary contact may render infection liable. As proof of the practical value of adopting such a method of procedure, I may add that it has been by no means an infrequent experience in the Winyah Sanitarium to find on examination of relatives, accompanying phthisical patients who have entered the institution for treatment, evidences of more incipient tuberculous processes, the existence of which had never been suspected.

It is not in every case, however, that the failure to obtain an early diagnosis is due to the patient's neglect to seek medical advice. Too often the physician also is found wanting. He may allow himself to be influenced by the patient's own statements and agree with the latter that the slight symptoms of which he complains depend upon overwork or some unimportant ailment; again, in the hurry of a general practice the physician frequently satisfies himself with the advice to take a vacation or with the prescription of a simple tonic and neglects to institute a careful and thorough physical examination. Such action was perhaps excusable in past times when the opinion was uniformly held that tuberculosis was an incurable disease, and when the diagnostic means at hand were not so thoroughly exploited as they are in these days of modern scientific progress. But times have changed and with a more exact knowledge of the special pathology of tuberculous affections, and with the rapidly growing interest in such conditions, particularly during the last decade, we have arrived at a better understanding of all that pertains to tuberculosis. We have learned that this disease is curable if taken in time and consequently the paramount importance of its early recognition has come to appeal more and more strongly to us as a profession.

Now, what are the physical signs and subjective symptoms which we must seek to recognise if we will make an early diagnosis in the true sense of the word; that is, at that period in which the first invasion of tubercles occurs in the lungs and before destructive changes are already conditioned or impending?

Among the symptoms which the patient himself may experience may be enumerated slight elevation of temperature, loss of

appetite, decline in weight, malaise, and occasionally digestive disturbances. The rise of temperature during the stage of tubercle formation rarely exceeds 99° to 100° F., and of this the patient is usually quite unconscious, for he soon becomes accustomed to it. For this reason it is essential to depend entirely upon the thermometer and to make a careful temperature record at two hourly intervals. A temperature disturbance, such as has been indicated, particularly if it is accentuated by physical exercise or occurs after meals or, again, in women if it becomes more marked at the menstrual period, together with part or all of the subjective symptoms which have been mentioned, is highly suggestive, and should cause the physician to institute a thorough and painstaking physical examination without delay.

It may possibly be noted that cough has not been mentioned as one of the early symptoms. I have purposely omitted it thus far because I desire to direct attention to the fact that it is by no means a constant phenomenon in the incipient stage of pulmonary tuberculosis. When cough is present it is due to catarrh of the alveoli or bronchioles or of both, but in cases in which the catarrhal changes are slight and little or no secretion enters the bronchioles, there may not be sufficient stimulus to induce it; or, again, it may be produced only by deep inspirations during physical exertion, laughing, talking, and the like. Consequently we must not be led by the absence of cough to indulge in a false sense of security.

Pleuritic pains and soreness in the chest, while only occasionally early symptoms, should not be overlooked. It is true that quite often inflammatory conditions of the pleura antedate demonstrable changes in the lungs by months and years. On the other hand, many persons who have suffered from pleurisy never show evidence of pulmonary tuberculosis at subsequent periods. At the same time, however, it appears to be well-established that the so-called idiopathic pleurisies which are attributed to exposure to cold, and the like, have no existence in fact, no more than do inflammations of other serous membranes, as those of joints and the peritoneum. Such inflammations, there is ample reason to believe, are due to microbic infection, and while a large variety of pathogenic microörganisms may give rise to these conditions it has been proven that very frequently their nature is tuberculous. The investigations of Schlenker showed that 61 out of 85 cases of pleurisy which he examined were tuberculous, and various other authorities have made

similar reports. With such evidence of the frequency of tuberculous involvement of the pleura, all cases of the so-called idiopathic variety, as well as all others in which other etiological factors can not be demonstrated, should be looked upon as in all probability tuberculous until the contrary is proven, while pain in the pleura should always lead the physician to make a careful physical examination. Thus we may discover an otherwise unsuspected tuberculous process of the lung which, but for the warning afforded by the pain, might have progressed for some time without becoming recognised.

Now as to the physical signs of the invasion of tubercles in the lung; in other words, of the incipient stage of pulmonary tuberculosis. At this time there is no percussion dulness, for the eruption of tubercles is not so dense, nor are there present sufficient connective tissue changes, neither is there as yet such obstruction in the alveoli and bronchioles as to produce it. As a matter of fact during this period there is so little evidence to be obtained by percussion that it may practically be ignored as an aid in making the diagnosis.

On auscultation, nevertheless, certain delicate signs are to be detected by the trained ear of the diagnostician. There is to be heard a slightly rough or rough vesicular inspiration, which may be of the interrupted or so-called "cog-wheel" type, independently of transmitted systolic cardiac impulses. At times an extremely delicate apical catarrh may be detected which makes itself appreciable to the auscultator by a slight sense of moisture or "stickiness" and which may attain to the degree of fine crepitation. This latter sign may often be rendered distinct by causing the patient to cough, after which it is to be heard at the end of the next deep inspiration.

The delicate auscultatory phenomena which have been recounted are those of local congestion of the alveoli and in themselves do not give the cue to what etiological factors are responsible. If the signs observed are due to transient conditions, such as colds, capillary bronchitis, and the like, they will gradually diminish and disappear. But, if after repeated examinations at intervals, they are found to *persist over a circumscribed area* of the lung, especially an apex in an adult, there need be no hesitancy in interpreting them as corroborative evidence of the eruption of tubercles.

Furthermore, when the subjective symptoms and perhaps the personal or family history, particularly, as to possible exposure

to infection, stand in accord with persistence of the early physical signs mentioned, we should make a positive diagnosis of pulmonary tuberculosis. Such evidence is conclusive and any additional diagnostic means, as for example the tuberculin test, are entirely superfluous. Cases will, of course, present themselves in which there may still exist in the mind of even the most expert diagnostician, an element of doubt as to the true state of affairs, and in which the suspicion of tuberculosis still appears strongly justified. In such instances and also if the physician is not quite positive of his ability to detect the delicate auscultatory phenomena of the formation of new tubercles in the lung, recourse may always be had to tuberculin diagnosis. Herein we have a method which, when properly applied, is not only perfectly safe and free from undesirable effects, but is at the same time eminently reliable as a means of determining beyond the shadow of a doubt whether or not a tuberculous process exists in the suspected individual.

The Röntgen ray has numerous advocates as a diagnostic aid, but its natural limitations must exclude it as affording no information in the period of the first eruption of tubercles. Not until the pathologic changes have advanced to such a degree that areas of considerable consolidation are present can we expect to obtain shadows which can in any way be characteristic. Again, as regards anomaly in the comparative range of movement of the two sides of the diaphragm, which has often been observed in phthisis, since this is due to structural alterations in the affected lung, we certainly cannot afford to wait, if we hope to make an early diagnosis, until such changes have taken place. We might with just as much reason delay in our diagnosis until the advent of the tubercle bacillus in the sputum, and we know that until destructive changes are occurring with softening, liquefaction and evacuation of caseous foci, the appearance of the germ in the expectoration is a manifest impossibility. Besides, an *x*-ray outfit is an expensive apparatus which but a comparatively few practitioners are able or willing to afford, and whose practical employment entails considerable experience to obtain anything like reliable results as a means of diagnosticating even early phthisis.

The method of early diagnosis by sero-agglutination, as practised by Arloing and Courmont, while undoubtedly of value in the hands of experts, implies the possession of facilities as

well as a minuteness of technical detail which render it unacceptable to the general practitioner.

A great many other signs and symptoms have been brought forward from time to time as aids in diagnosis. In passing may be mentioned the so-called "pretuberculous albuminuria" of Tessier,[1] of which there is yet not sufficient evidence that it is anything more than an ordinary transient albuminuria, a widely dilated state of the pupils[2], a peculiar facial expression which has been considered as characteristic, abnormal conduction of heart sounds which is, as a rule, indicative of consolidation, a sense of vibration in the chest on speaking or vocal fremitis, of which the patient is himself conscious (which if present is again an evidence of consolidation), lack of lustre of the hair, the well-known clubbing of the nails, and even the odor of the breath, as well as others too numerous to enter into consideration in a paper of limited extent. While such phenomena are of clinical interest and of more or less confirmative diagnostic value, many of them are concomitants of more advanced stages of the disease and none of them can have more than an incidental bearing upon the question of diagnosis, particularly of early diagnosis.

For really practical purposes we must continue to depend for the early recognition of pulmonary tuberculosis, upon the symptoms and usual methods of physical examination in general, and the tuberculin test when in doubt—means which are surely quite sufficient when painstakingly and intelligently exploited.

Experiences in the Philippine Islands.[3]

By MAJOR W. P. KENDALL, M. D.,
Surgeon U. S. Army.

AFTER listening to the able paper by my confrère, it would be superfluous for me to deal with the subject of the effects produced by the modern weapon. In consequence I shall eliminate it from what I have to say, as far as possible, and touch upon it only where it has a direct relation to the consideration of some particular case I shall present.

Instead, I will invite your attention to conditions in general, which, because of their influence upon any given injury, must be

1. Tessier. Cited in American Year Book of Medicine and Surgery, 1897, p. 35.
2. Thos. F. Harrington, Journal of Tuberculosis, Vol. XI., p. 5.
3. Read at the 27th annual meeting of the Alumni Association, Buffalo University Medical College, May 2, 1902.

considered as important factors when studying the probable outcome as a whole. The few cases which I shall present owe their interest more to the fact that they are somewhat unusual rather than that they can be called wonderful. Remarkable surgery is more apt to be seen in your hospitals which, to say the least, are as well supplied as are those who are working in the field.

A great commander has said that an army fights upon its belly. It is as essential that the surgeon should have a foundation upon which to work, as it is that troops should be properly and well fed. The vitality which is apparent, when you see a regiment of young, lusty fellows drawing out from your station is not present months afterward in the Philippine Islands.

The exposures to a constant, though not extreme elevation of temperature, caused by a tropical sun; to days of marching through bamboo forests, over roads, or paths rather, which would stall a horse, with their bottomless depths of clayey mud; to nights of waking while lying in troughs of stagnant water or pouring rain, nourished only by such food, possibly for days, as in addition to the 30 or 40 lbs. of his equipment, a man is able to carry upon his back; to say nothing of poisoned drinking water, and swarming mosquitoes, are not potent factors, either in the upbuilding or maintaining of a condition desirable for operative procedures.

In all military operations these things exist, they are a part of it, and unavoidable. While always to be considered they exist in the Philippine Islands to an extreme degree, furnishing food for thought for both commanding general and his surgeon.

The condition though insidious in its approach and immeasurable in its extent is, nevertheless, constantly present and becomes a prominent factor every time a patient is brought to the operating table. As applied to any given case it may not be considered in any sense vital; it is, however, a factor and has an immediate bearing upon every gunshot injury, even though unrecognised. I mention it in order to call your attention, *en passant*, to that which, while dealing with the more direct and tangible, might be lost to view.

As disease is to be classed among the first of these influences which break the backbone of an army, even while the *prima viæ* is well supplied, let us glance for a moment at some of those which more particularly engage the attention of the army surgeon in the Philippine Islands.

Mosquitoes are everywhere, the year round, though not, as a rule, in numbers that would be considered excessive; the clay soil, holding as it does, the large rain fall, and the abundant vegetation furnish exactly the required conditions for their birth and development. All unprotected sooner or later become infected with malaria, and while the variety is not so severe in its nature as that found in Cuba and Puerto Rico, still the worst forms are not unknown, and the best is bad enough to eventually undermine an entire regiment. It is one of the most important diseases the army in the Philippines has to contend with.

The next most important is probably dysentery, of which two varieties are seen. The acute, not very troublesome, and the chonic or amebic. Of this latter, cases are to be found everywhere, and unfortunately once infected, no one can see the end of it. It is too apt to be a lingering sickness covering months and years, with its ups and downs, until death finally ends the scene. So far, no good remedy has been discovered, though they do improve when sent to a colder climate. All the usual remedies are absolute failures. High rectal injections of aqueous solutions of quinine sulphate, of a strength of from 1-1000 to 1-2000 are most in vogue, and seem to have some effect, but real cures are widely separated.

Typhoid fever exists there, as it does here, and apparently runs about the same course. The population is dense. No attempt is made at sanitation, and the water, which is obtained from wells, or wherever it can be found, runs filth, so the wonder is small that non-immunes quickly fall victims. The natives probably owe their immunity to an illustration of the survival of the fittest, the weaker having died early.

Owing to the fact that vaccination has been little practised, smallpox is found generally affecting the children, the elders having had it. The troops have been slightly troubled with it and a few deaths have occurred.

Tuberculosis is said to be a very frequent and fatal malady among the natives, but as yet it has no marked influence upon the health of the army.

Beriberi and leprosy exist almost altogether among the natives or Chinese. The moving of the camps to a dry, sunny spot has terminated outbreaks of the former; while a Lazaretto on some suitable island is contemplated for the 30,000 lepers now in the islands. It is not necessary to state that the American forces have not been troubled with either of these diseases

though it is true, that a few cases of beriberi have been seen. Holding, as I think most do, with Manson, that the poison of beriberi is an ether emanating from a microbe whose habitat is the moist worm soil, instead of the human being, the nitrogenous starvation theory as a cause, is abandoned and while not neglecting good food, the one object seems to be, to get these patients away from the infected spot; the results following such steps warrant the entertainment of Manson's theory.

While I was there the bubonic plague broke out, but was confined, almost altogether to the native population and Chinese. If it were not for the abominable way in which these people live, crowding together as they do by the dozen, there would be no difficulty in handling the disease.

Venereal troubles always play a large part in the health of an army of occupation. It was said, with what truth I do not know, that there was less in the country before our arrival, than afterward. There appeared to be about the usual amount.

One can hardly dismiss the thought of infected water without touching upon the diseases produced by the presence of intestinal parasites, and while every variety known to the profession was occasionally seen, that known as ankylostomosis, or Egyptian chlorosis, and caused by the presence of the ankylostomum duodenale, is the most harmful. As these cases are, until in advanced stage, all ambulating, it is impossible to estimate their numbers. In Puerto Rico it is said that more than 84 per cent. of all the natives sick and well, harbor these parasites; it is not unfair to believe the disease is more widely spread than we realise. The other parasitical diseases are easily handled; but this one, though thymol at times is effective, is not at all controlable.

Both typhoid fever and amebic dysentery, were greatly diminished in numbers wherever they were able to get a pure water supply, or could boil that which was available. The anopheles works only after about sunset, consequently protection for the troops at night was indicated, and mosquito bars were furnished when possible. Could this be thoroughly done, practical immunity might be expected.

It will be remarked that all the common diseases of these islands are such as can be readily controled by sanitary measures, and the fact is that nothing but careful attention to these principles is necessary to make of the Philippine Islands as healthy a spot as is that of Buffalo.

In dealing with the subject of gunshot wounds, having considered the general conditions which might influence the course of any given injury, one immediately thinks of the direct factors, such as the nature of the missile, the rapidity of its flight, its size, and the like, together with the portion of the body injured, whether fleshy, bony, vascular or tendinous, whether the head be struck, or the abdomen penetrated; if a vital part has not been struck, that which is of more importance than all the rest put together, is the immediate treatment the wound receives.

As a general rule bullet wounds are aseptic, and cases were frequently met which proved its accuracy. We all know why an aseptic wound does not remain so. On the battle field conditions are not such as are found in a modern, well-regulated operating room. If accidents happen to prevent the working out of carefully arranged plans, it was but the inevitable, the reverse of what was expected. What else is war anyway? Somebody's plan is upset. If it were necessary to dress a wound with a bandage which had been carried by the man himself for days, exposed to rain and dust, and saturated with the perspiration of his body, what must be the consequence?

If suppuration follow is it any wonder? The doctor, if one were present, may have worked to the tune of whistling bullets; often, generally the case. The nearest, even impure, water may have been within the enemy's line; possibly he was in a hurry. It is not impossible that he had many to dress. This does not affect the rule. It does emphasize the fact that every possible precaution must be taken at the first dressing. In support of the statement, a few cases came under my observation. A ball (probably mauser) passed from side to side through the knee joint, and beneath the patella. The wound healed without incident, and in a few days the man was as well as ever.

A lieutenant was shot in the right side, the ball passing from before backward, probably traversing the liver. In ten days the man was up and around and a short time afterward reported for duty.

A captain was struck in the thigh, fracturing the femur about three inches above the knee-joint. He was dressed on the field; carried thirteen miles in an ambulance; put upon a Hodgson splint and beyond a severe synovitis, had no complications, and although the ball remained in situ, made the normal recovery of a simple fracture.

I am able to present to you one of these cases, that of a man who received a ball in the left thorax, which, ranging directly backward, and lodging beneath the scapula, did great injury to vessels and nerves, but suppuration did not follow and he brought the ball home with him, to have it removed here in your hospital.

Similar cases might be cited by anyone who has seen many. While cases which have become infected are daily occurrences. Because of their severity let me cite three which had became infected, and unfortunately by the bacillus ærogenes capsulatus. One of these was a flesh wound of the calf of the leg, the other two, flesh wounds of the thigh and buttocks. Such dressings that were at hand were used; and in all these an attempt had been made to arrest slight hemorrhage by introducing into the wound gauze, or oakum. All three reached the hospital, and all died within a few hours, due to the terrible depressing effects of the toxin produced by this organism, the injuries in themselves being absolutely nothing. How these wounds became infected it is, of course, useless to surmise, unless it were possible that the dust of battle had settled, either upon the dressings or into the wound. Two of these came from the same field, and it is probable that, like the tetanus bacillus, this organism finds its habitat in the soil of certain localities. There are few pathogenic bacteriæ whose presence the system can so poorly support; however, the effects produced by all are bad, and the deductions are plain. Don't infect a gunshot wound. If you are not in a position to dress it aseptically, do only so much as is necessary to protect it while in transit to a point where it can be properly attended to.

Recognising the necessities, an attempt has been made to accomplish this for those wounded upon the battle field, and today every United States soldier carries what is termed an "emergency packet;" this consists of sterilised gauze with bandages wrapped in waxed paper; when new, these answer the purpose admirably, and the soldier, or comrade, always has at hand a suitable dressing. The trouble is, however, that after a while they become infected by saturation of either rain, or perspiration from the man's body, in consequence losing their virtue.

In examining a gunshot wound, the question at once arises as to the course of the ball. Usually there is no difficulty in determining it. The rule that the wound of entrance is small while that of exit is larger, is almost always demonstrated.

Cases are, however, not wanting when the most careful examination fails to disclose the direction the ball has taken. You would imagine the man himself could help you, but due to the excitement of battle, or the fact that the attack came from different directions, this is not always the case; fortunately, it seldom is a matter of moment. Of one thing you can be certain, the extent of the injury between the two points is always greater than would be judged by an examination of the openings in the integument; frequently the amount of damage done is amazing, and that when but two round clean cut holes exist in the skin. This is due particularly in the soft tissues, to what is known as the explosive effect of bullets. When a ball is fired into a can of water, instead of merely passing through it, as might be expected, the can is exploded in all directions, following the physical law that pressure upon liquids is the same in all directions. It is believed that the fluids contained in the tissues act as that in the can, and the consequence is, that the effect produced by the passage of a foreign body is transmitted widely, destroying the tissues nearest to its track, while at the same time producing a devitalising effect upon those more remote. This rule applies alone to the soft tissues. Bones resist this force unless struck when the force becomes transmitted through another medium. In the case of bones, force is transmitted in such a way as to produce trouble at points some distance from the track of the missile. This consists in either shattering or splintering. The greater destruction being done, as would be expected, by the larger ball; while the smaller may even bore its way through a bone, causing no other damage than is produced by this small gimlet-like track. The difference in the effect produced by the old Springfield with its 45 caliber ball, traveling with an initial velocity of 1,100 feet per second, as compared with the modern Mauser, or Krag-Jorgenson, with its 30 caliber, traveling about 1,900 feet per second, may be summed up in a general way at about 50 per cent. in favor of the larger.

A comparison of the records of the Surgeon-General's reports for the civil war and the late ones shows that of all men wounded during the former, about 18 per cent. were killed outright, as compared with only 12 per cent. so killed during the Spanish-American and Philippine wars.

In every gunshot injury, especially with the ball remaining in situ, the question at once arises, as to how much shall be

done; whether we shall begin a possibly hopeless search for a deeply buried ball, or whether we shall cleanse it thoroughly and wait. The case of the captain with a broken femur, illustrates that the latter can be done, and I believe that it should be in all cases where there is a probability of non-infection. Of course, if it has become infected, the sooner it is thoroughly dressed and the ball removed the better. Surgery is a synonym for assistance. It is certainly better to have an aseptic compound fracture of the femur even though there be present some fragments and a ball, rather than a condition we can imagine, brought about by superfluous handling. It is true the case I have mentioned is the exception; they too frequently were infected. I believe, however, it illustrates a principle and furnishes a standard we should hope for and strive to reach. If there be an exception, it is in the case of penetrating wounds of the abdomen. While we can take a chance for our patient and find out whether the wound be infected or not in other wounds of the body and extremities, it is here a doubtful policy. A possible perforation of the intestine means too much and, although by so doing, I take a stand upon the wrong side in the light of some statistics from the reports of recent scenes of action, I cannot accept the statement that there are more recoveries from gunshot wounds of the abdomen where operative procedures were not attempted, than where they were. This is but an arraignment of ourselves. We kill our patient. As no one is prepared to accept this, what explanation can be given?

Mine is, that there are two classes of cases entirely incomparable. Among those operated upon, with death following, were all the severe cases. Those in whom the injury was great, with possibly several perforations of the intestine, they demanded an operation and would have died anyway, they were not made worse by the operation; while among those who were not operated upon, yet recovered, were all those whose injuries were slight, with no perforation; properly operated upon, they would have recovered, as they did; they, too, would not have been made worse by the operation.

Unfortunately, I am unable to point to any of my own cases in proof of my position. Others have been more fortunate, and we can certainly hope for it, even when we do not realise it. I had the opportunity to operate two or three times, always several hours after the receipt of the injury, and as I have said, I was not successful. I do not believe they would have recov-

ered left to themselves. On the other hand, I saw two cases which were examples of the second, or milder class. One was operated upon, the other was not; both recovered, and both would have recovered if left to themselves.

In one, the ball entered at the seventh costal cartilage, upon the left side, ranged downward and backward, and lodged beneath the integument of the left lumbar region; having in its course entered the peritoneal cavity, perforated the omentum, and gone out again, at a point some $2\frac{1}{2}$ inches from where it entered, without in anyway doing injury to the intestine; in the other the ball entered at a point 1 inch above and the same distance inward from the left ant. sup. spinous process of the ilium, going I know not where, but it came out at the gluteal fold of the opposite side, near the tip of the cocyx. One was operated upon because it was seen early and because it was considered to be imperative; the other was not operated upon because he was not seen until late, when it was certain that he was in no danger. Both cases illustrate what a ball may do, and one at least illustrates why it may not always be necessary to operate. In this latter case, the intestine surely was not damaged. Though how it can be possible, I believe the same to have been true of the former, I should be pleased to have some one offer an explanation. One thing I have not mentioned, and that is that the small ball traveling rapidly, is less liable to be deflected than is the large one traveling slowly. It is not possible that the ball in this case could have followed any fascia.

Speaking of apparently fatal wounds, recalls one of a man who received the ball in the third intercostal space of the left side, at the border of the sternum; its point of exit was directly behind at the base of the spine of the scapula. As 400 c.c. of blood were drawn from the left pleural sac, it certainly passed through that; the rest I leave to your imagination. He made an uneventful recovery with no sequelæ.

As an apparent illustration of the great length of time certain pathogenic organisms can lie dormant in the system, I recall the case of an officer who had had an abscess, the result of a lacerated wound of the lower end of the left femur, when ten years of age. The recovery was apparently complete, no symptoms having been noticed since that time, and during his twenty-seven years of service, he had been on sick report but three days. With no other discoverable cause, an acute osteomyelitis of the femur developed, and ran a rapid course. The

pathologist reported a pure culture of the staphylococcus pyogenes aureus. If there were a connection between the two, this organism had lain dormant forty-two years.

While upon an independent marauding expedition, a man received a bolo wound, at the upper part of the right parietal region. At the dressing no fracture was detected; five days later, when I first saw him, he was unconscious; had a temperature of 105° and was having frequent, irregular convulsions. There was no paralysis, and the pupils, which reacted somewhat to light were about normal. When placed upon the table and the wound opened, it was found that the lateral halves of the skull moved easily, one upon the other. Trephining was done and a large blood clot and spiculæ turned out. He made an uninterrupted recovery. In a few hours, apparent consciousness returned. In thirty-six hours all convulsive movements had ceased, and in forty-eight, the temperature reached 100°. It might seem as though he had had enough, but the court added five years.

One case, while it presented no complications, yet gave us a great reputation among the native population, was that of a Filipino woman, for whom we successfully removed an ovarian cyst, which weighed 40 lbs. Those of you who recall the size of those women who were at the exposition last summer will see no great difference between the size of the tumor and the woman. They don't operate in those cases as early as you do.

FORT PORTER, N. Y.

Congenital Pulmonary Stenosis.[1]

BY JOSEPH BURKE, SC. M., M. D.,

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(*Continued from August number.*)

AFTER a perusal of the literature and with a consideration of our cases the most constant symptom of pulmonary stenosis appears to be the cyanosis. We find all grades of this cyanosis described, from the most outspoken blueness, as we find it in the cases of most severe malformation of the truncus arteriosus, to a single livid discoloration, as we find it described

1. Read before the Medical Society of the County of Erie, June 17, 1902.

in individual cases. How marked this cyanosis must be in cases of pure pulmonary stenosis cannot be absolutely determined, for there comes into consideration one circumstance above all others, and that is, that the patients first seek medical aid at a time when severe symptoms occur, where eventual adaptations, which serve to compense the mechanical disturbances, have already suffered. We must discuss the forms of cyanosis which, theoretically considered, must occur in pure pulmonary stenosis of medium or high degree, though not by atresia.

The compensatory element in pure pulmonary stenosis will lie in the hypertrophy of the right ventricle. The following phenomena and the severity of the cyanosis must depend upon the degree of this hypertrophy. By slight degree of hypertrophy or by absolute failure of such, the venous pressure must rise, the veins dilate, and we see really that in these cases secondary changes—as increase the number of erythrocytes, dilated and tortuous veins, epistaxis, hemorrhages, dilated ascending capillary network in the papillæ, richly developed capillary network in the skin in general, low temperature, clubbing of the finger ends—take place.

We might have in some cases a form of cyanosis which is due to a lack of development—a primary insufficiency—of the right ventricle. In cases of pulmonary stenosis, where the foramen ovale is open, a cyanosis can occur even by good function of the right ventricle, by hypertrophy of the same, which perhaps is partly local. A mixed cyanosis through the ductus Botalli is excluded, because the stasis is from the aorta into the pulmonary and not the reverse, as in the fetal condition. The circumstances lie differently if the right ventricle becomes insufficient. The change that results in the venous pressure must have an influence upon the cyanosis, as was formerly discussed, but this phenomenon differs from the former as well as the primary from the secondary insufficiency. Aside from the changed venous pressure, the weakness of the right ventricle must have further consequences, if, beside the pulmonary stenosis, also other disturbances of the heart, as septum defect, open foramen ovale, open ductus Botalli, are present. An existing septum defect would cause no increase of the cyanosis; the same can be said of a persisting ductus Botalli. The increase of cyanosis in these complications can result from the purely mechanical effects of the stenosis at the pulmonary orifice and the insufficiency of the right ventricle.

The conditions are different if the foramen ovale is open, for then we must expect the following: if insufficiency of the right ventricle occur then a stasis in the right auricle takes place, and as a result, this increase of blood pressure in the auricle leads to a regurgitation of the blood into the left auricle, with it to a stasis in the lungs and to an increase of the work of the already overtaxed right ventricle. This form of the *late* cyanosis is caused in a similar manner as is the cyanosis in incompensated mitral lesions. Perhaps we can explain in this manner the otherwise inexplicable dilatation of the pulmonary artery above the stenosis.

Dyspnea.—As the next most frequent symptom we find dyspnea. It occurs particularly in the later stages, or as a result of severe exercise. The cause of this dyspnea will always lie in the weakness of the right ventricle. The late cyanosis, already described, by open foramen ovale with pulmonary stenosis, must particularly have as a result a high degree of dyspnea. Above all, the degree of stasis in the lungs, the "Lungenstarre of v. Basch" will bring about an increase of the cyanotic character of the blood and through this an influence upon the respiratory center in the medulla. The change in the bodily warmth and the subjective feeling of coldness can doubtlessly be traced back to the cyanosis.

Also the frequency of convulsions in children with pulmonary stenosis must be mentioned as an accompanying phenomenon of this affection, and traced back to the cyanosis.

Further symptoms are various phenomena, as arrest of development and growth of the body, or especially of certain organs, particularly the genitals, so that a certain infantile habitus in many cases results. We are not in a position to decide whether there is a causal connection between the phenomena and the disturbances of the circulation which the pulmonary stenosis brings about, because we must assume in a series of cases that the pulmonary stenosis and these phenomena are an expression of a disturbance in fetal growth.

If therefore malformations in other organs occur in cases of pulmonary stenosis, it appears probable that a causal connection between both these anomalies can be thought to exist in this way: that both are the results of one cause—namely, a disturbed development. There is one factor that in some cases can play a rôle, a factor that we will later consider in detail, and one which is a frequent accompanying phenomenon of the pulmonary

stenosis—namely, narrowness of the blood-vessels, particularly narrowness of the aorta.

Kyphosis.—Eger explained the constant presence of kyphosis in four of his cases through the weakness of the muscles of the back, which he makes responsible. Other observers also draw attention to this symptom.

It is very remarkable that hydrops occurs so seldom, particularly if one compares the pulmonary stenosis with the acquired heart lesions. The greater majority of cases die in childhood and the most of those who attain a considerable age die usually from pulmonary tuberculosis. The connection between pulmonary stenosis and pulmonary tuberculosis we will discuss later.

Local Symptoms and Diagnosis.—The diagnosis, intra vitam, of a congenital pulmonary stenosis in the adult has been so often made and attested to by the autopsy findings that the differential diagnosis of this lesion in classical cases causes no particular difficulty, while in the atypical cases produces often no little uncertainty, and leads to error. The constant objective signs in our three cases were as follows:

1. An outspoken rough systolic purring which could be felt most distinctly in the second intercostal space to the left of the sternum and which could be followed into the left shoulder (2) a distinct enlargement of the heart dulness to the right; (3) one could hear a rough, sawing systolic murmur over the whole heart, but the clearest in the second intercostal space to the left of the sternum; the same was transmitted in two of the cases into the left shoulder.

In reference to the behavior of the second tone it would be worth remarking that on account of the diminished blood pressure in pure uncomplicated cases of pulmonary stenosis, one should expect a weakness, or an absence, and under no circumstance an accentuation to the second pulmonary tone. Where an insufficiency exists a diastolic murmur will be audible.

4. The presence of tuberculosis in the lungs.

These four above mentioned symptoms justified us every time of making the diagnosis of a pulmonary stenosis; as also in the literature these have been the most constant signs in the typical cases.

Diagnosis of the Complications.—In reference to the diagnosis, whether a complication in a case of congenital pulmonary stenosis be present, there are several phenomena which point to

this possibility, only the differential diagnosis of the same affords much speculation. But in spite of this, some clinicians succeed in diagnosticating the abnormal conditions that accompany the pulmonary stenosis, *e.g.*, persistence of the fetal canals, as the following will tend to show. We will first consider the presence of a septum defect.

The diagnosis in the third of our cases of septum defect made, intra vitam, and demonstrated at the autopsy, was based upon the following points: (1) On account of the age of the individual —21; (2) on account of the loudness of the first tone over the pulmonalis, an expression of the contractile power of the right ventricle; (3) on account of the intensity of the cyanosis; (4) on account of the demonstrable hypertrophy of the right ventricle.

There are cases in the literature in which, on account of the transmission of the systolic murmur into the vessels of the neck, a septum defect was diagnosticated and proved by the autopsy. In other cases the accentuation of the second pulmonary tone has been considered diagnostic. Broadbent mentions a harsh, loud, continuous murmur heard during systole and diastole, which he compares to the sound made by a knife grinder's wheel when a knife is being sharpened, and considers as diagnostic.—Broadbent, heart disease, p. 227.

Diagnosis of Open Ductus Botalli and Foramen Ovale.—Concerning the differential diagnosis of the persistence of the ductus Botalli or an open foramen ovale, we can consider both conditions at the same time. We must remark in the beginning, however, that in cases of pulmonary stenosis in the adult, where the stenosis is not complete, let the situation of the same be at the conus part or on the valves, the most seldom persistent fetal communication is the ductus Botalli, and on the contrary the remaining open of the foramen ovale is extremely often observed.

When we speak in the following of an accentuation of the second pulmonary sound, we wish to state emphatically that an apparent accentuation of the second sound can be caused through external agencies not lying in the heart, as thickening of the lung, retraction of the borders of the lungs, although the pulmonary sound probably shows its usual strength. When we therefore speak of an accentuation of the second pulmonary tone let it be understood that we use such a finding in the sense of a loud second pulmonary sound only.

It is further, a clinical, as well as a physiological, well-established fact, that in cases of aortic valvular stenosis the

second sound is weaker than usual, or is absent, and never appears accentuated, because the blood pressure above the stenosis is less and never more than normal; but if such a stenosis is situated at the conus part then the second sound can be not only normal but even loud. The same applies to a stenosis on the pulmonary and therefore we must expect in cases of congenital pulmonary stenosis a weak or an absent, and never an accentuated second pulmonary tone, except when a conus stenosis and a complication are present. Also passive congestion in the lungs can make the sound appear louder than corresponds to the blood quantity which passes through the stenosed orifice.

Supported by this physiological basis we can consider the possibilities of the importance of an accentuated second pulmonary sound in a case of congenital pulmonary stenosis. For the existence of such an accentuation of the second pulmonary sound—if it be due to the closing of the pulmonary semi-lunar valves—three absolutely necessary factors must work in harmony: (1) The situation of the stenosis must be confined to the conus part; (2) an increase of blood pressure must exist in the pulmonary artery; (3) the pulmonary valves must be healthy and totally or partially able to close.

When, therefore, the accentuated second sound in a case of congenital pulmonary stenosis is due to the closure of the pulmonary valves, such a loudness can originate through one certain condition—namely, through an increase in the blood pressure from the left heart above the stenosis, or through a persistent ductus Botalli. This teaching that the accentuation of the second pulmonary sound, in a case of congenital pulmonary stenosis, indicates a conus stenosis and a remaining open of the ductus Botalli, although only a result of theoretical physiological discussions and not founded upon physiological facts, is so generally recognised and willingly accepted that every assertion to the contrary must be supported by the most fundamental and most convincing proofs.

We are necessitated to deviate from this so generally accepted teaching and feel ourselves justified in assuming that the presence of an accentuated second pulmonary in pulmonary stenosis can be interpreted as a constant and pathognomonic sign for the presence of an open foramen ovale.

In the discussion of this question of the significance of the second pulmonary sound, we will analyze and tabulate the

accessible published cases of congenital pulmonary stenosis where the attention of the clinician has been directed to the consideration of the second tone; we will find out in how many of these cases with accentuated pulmonary tone the ductus Botalli persisted and functionated, and at the same time in how many the foramen ovale was open.

TABLE I.

Name of Author.	Character of the Second Pulmonary Sound.	Foramen Ovale.	Ductus Botalli.
Kisel	Normal.	Open.	Closed.
Krönig	Not accentuated.		Open.
Variot	Not mentioned.	Closed.	Open.
Bury	So remarkably accentuated that open ductus Botalli was diagnosed. The pulmonary valves were so intimately grown together, that they were not in condition to have caused a loud sound; the 2 aortic tone was less loud than the 2 pulmonary.	Wide open.	Closed.
Cassel	Loud, clapping.	Open.	Obliterated.
Croker, No. 1	Split.	Open.	Open.
Dittrich	Short, accentuated. Valves five times thicker than normal; conus stenosed, high degree; valves insufficient.	Open.	Closed.
Kaulich	Well limited, distinct.	Open.	Closed.
Leo, No. 2	Clear.	Open.	Closed.
Grummach	Remarkably loud, accentuated.	Wide Open.	Closed.
Wallach	Long, dull.	Wide open.	Closed
Weiss	Increased.	Open.	Closed.
Feriol	Not mentioned.		Open.
Fraenkel	Not mentioned.		Open.
Young	Not accentuated; distinct.	Open.	Closed.
Nixon	Accentuated.	Open.	Closed.
Vèlon	Not mentioned.		Open.
Ackerman	Clear.	Open.	Open.
Jacobowitsch	Not clapping.	Open.	Open.
Bozannis	Clear.	Open.	Open.
Brauner	Increased.	Open.	
Achilles	Accentuated. Valves so intimately grown together could not have caused tone.	Not mentioned.	Closed.
v. Rad	Accentuated.	Open.	Closed.
Burke, 1	Accentuated.	Open.	Closed.
" 2	"	"	"
" 3	"	"	"

TABLE II.

	Number of Cases.	Character of Second Pulmonary sound.
Ductus Botalli open—alone	3	No accentuation.
Foramen ovale open—alone	6	Accentuated in all.
Foramen ovale with ductus Botalli	5	Accentuated in all.
In our cases was the foramen ovale open in	2	Accentuated in both.
Foramen ovale with defect in septum	1	Accentuated.
Open foramen ovale—alone	8	Accentuated in 8.
Open foramen D. Botalli	5	Accentuated in 5
Open ductus Botalli alone	3	Accentuated in 0.

An analysis of these tables brings forth the interesting fact that in fourteen cases of pulmonary stenosis with certain accentuation of the second sound the open ductus Botalli was never found present; on the contrary in three cases, where the ductus Botalli was the only complication, the second tone appeared in two of them weak, and once absent. One finds in the predominance of cases, where clinically an accentuation of the second pulmonary tone was observed, an open foramen ovale, which could give rise to the idea that a certain causal connection might exist between this accentuation of the second pulmonary sound and an open foramen ovale. From a perusal of the literature in this respect, we can see some further interesting factors, particularly this one, that the origin of a second pulmonary sound as a valvular tone, judging from the post-mortem finding, is impossible, as various authors emphatically testify. We also must mention that in our three cases the conditions were similar. For, in the first of our cases, the valves were so changed from the endocarditis that the cusps were grown together and so stiff that not only a high degree of stenosis at the conus was present, but also a stenosis and insufficiency of the valves as well; according to the anatomical findings it must have been impossible for these valves to have produced a tone; at any rate, an accentuated one. In the third case there was a high degree of conus stenosis, "for the first finger penetrable, with apparently two cusps, one of which was delicate and slightly thickened on the free border, while on the other a hard, and irregular thickening appeared on the insertion of the cusp from the sinus Valsalva;" therefore it was hardly possible that the second sound, which appeared so accentuated, was caused by the closing of these valves. Apart from this there was not a sign of a persistent ductus Botalli. In our second case, I am sorry that a detailed description in the post mortem records is wanting, therefore it would be hardly possible to judge whether

the valves could produce a sound or not. At any rate, they were stenosed and insufficient, and could hardly have given rise to an accentuated tone.

In many of the above cited cases in the literature, *e.g.*, in the case of Bury, where the second sound was so remarkably accentuated that that observer diagnosticated a persistent ductus Botalli, the valves were so adherent that they could not have given rise to a tone; and in Dittrich's case, where the second tone was short and accentuated, the valves were five times thicker than normally and insufficient, the conus highly stenosed, all of which evidence tends to prove that the pulmonary valves could not have caused the accentuation heard in these cases. If the accentuation of the second sound was not due to the closing of the pulmonary semilunar valves and the persistence of the ductus Botalli, then there exist three other possibilities to explain its origin: (1) It could have been transmitted from the aorta; (2) it could be caused by the contraction of the walls of the pulmonary artery; (3) or by contraction of the hypertrophied auricular walls.

The fact that one would expect an increase in the arterial blood-pressure by such a transmission and ought to hear this sound with greater, or even at least equal, intensity over the aorta, would speak strongly against the first possibility; in none of the cases quoted here has this been observed; in our cases certainly it was not the fact.

There appears absolutely no positive proof for the existence of the second possibility, while for the third possibility of the mode of origin there are several signs that support such an assumption, because there is in a normal heart an auricular sound, which, on account of external conditions, is not heard, and which under pathological conditions, as in increase of blood pressure in the auricle, becomes audible. Besides, we find here a circumstance which, as the autopsy results prove, lead to hypertrophy of both auricles, and this is the remaining open of the foramen ovale. It might be possible therefore, that the very loud sound is produced by the contraction of the abnormally filled hypertrophied auricles.

In pulmonary stenosis with open foramen ovale an increased function of the right as well as the left auricle exists, in order to overcome the opposing pressures, to prevent an overstreaming of the blood. This fact is supported not only by the hypertrophy demonstrated at the autopsy, but also by the fact that the

valvula Eustachii is so often found developed, which shows the existence of a function of the same during life—namely, the transmission of blood to the foramen ovale. If the blood which flows along the Eustachian valve meets a lower pressure in the left auricle, the venous blood must flow into the left auricle; in compensated cases, however, where the auricles are sufficiently hypertrophic to prevent this mixing of the blood, this does not take place, because the constant working of one positive pressure against another of the same intensity causes a hypertrophy, and so the contraction of these hypertrophied walls can produce a tone which is heard in the diastole or presystole according to the time of the auricular contraction. I believe, therefore, that the accentuated second sound in pulmonary stenosis, where no ductus Botalli but an open foramen ovale is present, is an auricular tone, and that the presence of an accentuated second pulmonary sound in such a case of congenital pulmonary stenosis is essentially characteristic of an open foramen ovale, but under no consideration pathognomonic of ductus Botalli.

We have in the foregoing accepted an opinion which is also shared by most authors, that in open ductus Botalli, through streaming over of blood from the aorta into the pulmonalis, the filling of the veins, as well as the pressure is raised, so that an accentuation of the second sound must occur.

In opposition to the negative finding of an increase of the second pulmonary sound as given by the statistics, there comes one factor above all others into question, which is little considered—namely, whether the lumen of the ductus Botalli in such cases permits of a sufficiently copious streaming over from the aorta into the pulmonalis. In a series of cases where it says, for instance, that the ductus Botalli would permit of a probe passing through it, such an influence of the communication must certainly be denied. If we expect that an increase in the tension in the pulmonalis, and as a result of it an accentuation of the second pulmonary tone, so must a great quantity of blood pass through the ductus Botalli from the aorta into the pulmonalis.

The origin of still another phenomenon mentioned by other observers, which occurred in two of our cases, and which can be interpreted in support of the diagnosis of an open foramen ovale—namely, the presystolic murmur, could be explained by the formation of eddies, which are caused by the coming together of the two blood currents in the auricles, especially in the end stages.

Table III.

No.	Name of Author.	Tuberculosis.	Character of the Aorta.
1.	Rickards	Present	Very narrow.
2.	Variot	Absent	Wide.
3.	Voss	Absent	Dilated.
4.	Howship	Absent	Wide.
5.	Farrel-Watson	Absent	Wide.
6.	Raule-Chasmal	Absent	Dilated.
7.	Mansfield	Absent	Wide.
8.	Mallach	Absent	Normal.
9.	Dubnell	Absent	Wide.
10.	Sibbold	Absent	Dilated.
11.	Mannkopf	Present	Very narrow,
12.	Frankel	Present	Normal.
13.	Wyss	Absent	Wide.
14.	Ashby	Absent	Normal.
15.	Maulard-Martin	Present	Narrow.
16.	Vereol	Present	Narrow.
17.	Young	Absent	Narrow.
18.	Casey	Absent	Normal.
19.	O'Sullivan	Absent	Normal.
20.	Velon	Absent	Normal.
21.	Hall	Absent	Wide.
22.	Krönig	Absent	Wide.
23.	Nasarow	Present	Narrow.
24.	Passaw	Absent	Wide.
25.	Hadden	Present	Narrow.
26.	Orth, No. 1	Miliary tuberculosis	Narrow.
27.	Orth, No. 2	Present	Narrow.
28.	Ackerman	Absent	Abnormally wide.
29.	Jakabow	Absent	Abnormally wide.
30.	Bozanis	Absent	Narrow.
31.	Schmidt-Kirsh	Absent	Wide.
32.	Aberle	Absent	Wide.
33	Rokitansky	Absent	Wide.
34.	Schautz	Present	Very Narrow.
35.	Bury	Absent	Narrow.
36.	Etlinger	Absent	Wide.
37.	Kaulich	Absent	Wide.
38.	Kruger	Absent	Wide.
39.	Leo. No. 1	Absent	Wide.
40.	Leo, No. 2	Absent	Wide.
41.	Grummach	Present	Narrow.
42.	Vitte	Absent	Wide.
43.	Bury	Absent	Wide.
44.	Weiss	Absent	Wide.
45.	Burke, No. 1	Present	Narrow.
46.	Burke, No. 2	Present	Narrow.
47.	Burke, No. 3	Present	Narrow.

Table IV.

Narrowness of the Aorta	13	Tuberculosis:	
	3	Present	13
		Absent	3
Cases	16		
Wideness of the aorta	31	Cases	16
Total cases	47		

As the last point of our discussion let us consider the influence which the pulmonary stenosis has upon pathological conditions in the lungs; and there we find advanced by the most prominent authors that congenital pulmonary stenosis leads to tuberculosis of the lungs. It is here pointed out above all others the anemia of the lungs due to the pulmonary stenosis, which is said to act as the causative factor in the origin of the tuberculosis. In opposition to this assertion there exist doubts even from a purely theoretical standpoint. For, in the first place, the lung tissue is not supplied by the pulmonary artery, but by the bronchial arteries which transmit the necessary blood quantity for the nourishment of the lungs; secondly, we see pulmonary tuberculosis comparatively seldom in acquired pulmonary stenosis. There does not appear, therefore to be a direct dependence of the phthisis on the pulmonary stenosis.

If we have recourse to the statistics and see whether in those cases of pulmonary stenosis where there could be demonstrated no change in the aorta, particularly no narrowness of the aorta, the pulmonary tuberculosis occurred so frequently, we discover from the literature that (see accompanying Tables III. and IV.) in 48 reported cases, with mention of the aortic circumference, 16 cases had narrowness of the vessels, particularly the aorta, in 13 of which pulmonary tuberculosis was present; in contrast to this, in 32 cases where wide, or normal volume of the aorta was present, no trace of tuberculosis was demonstrable.

We have already mentioned above that we are obliged to explain other malformations which we find in the majority of cases of pulmonary stenosis as coördinate phenomena of a disturbance of the fetal development, and it does not appear wonderful therefore that we see occurring in a series of cases where this development was arrested phenomena which likewise are only results, as the pulmonary stenosis itself, of this developmental disturbance. Such is according to our opinion the tuberculosis of the lungs in people who have pulmonary stenosis.

The tuberculosis is due to a developmental anomaly—namely, congenital narrowness of the aortic system.

In conclusion, we would like to recapitulate briefly the logical results of our discussion.

We feel ourselves justified in assuming that:

1. The theory of Kussmaul, "Die Correctur der Stauungstheorie," appears to us the most probable, as the etiological

factor for the origin of the pulmonary stenosis, because it sees a cause in the embryological arrest in development, as well as in the fetal inflammatory phenomena, for the development of a congenital pulmonary stenosis.

2. Through the pulmonary stenosis itself, a series of malformations of the heart in the fetal condition, can be promoted, as must be critically inferred.

The pulmonary stenosis of moderate degree can promote the remaining open of the foramen ovale, as well as eventually the persistence of a septum defect. The ductus Botalli remains uninfluenced or even hindered, by the pure physical narrowing of the pulmonary stenosis. The statistics agree with this assertion and demonstrate that the foramen ovale occurs very frequently, the ductus Botalli quite seldom in combination with congenital pulmonary stenosis.

In the extra fetal state the pulmonary stenosis affects the right ventricle. Where there is a lack of development of the same we see a condition occur which corresponds to a primary insufficiency. The result of this is stasis in the veins, cyanosis, epistaxis, dilated venous network, and the like.

By good tendency of the same so that a compensatory hypertrophy can occur, the pulmonary stenosis can cause a mixed cyanosis, particularly in open foramen ovale.

Whether a similar occurrence, a mixed cyanosis, can take place by septum defect, we will leave the question unsettled, *sub judice*. This circumstance changes immediately if an insufficiency of the right ventricle occurs. In this case the so-called late cyanosis can occur through this secondary insufficiency. The same can be due, first, to the increase of the venous pressure, of the venous stasis, of the slowing of the venous current; second, there exists in open foramen ovale a further possibility of the occurrence of the increase of the cyanosis and dyspnea through the following circumstance: as a result of the weakness of the right ventricle, a damming back into the right auricle takes place; from there the blood passes through the open foramen ovale into the left auricle, a stasis in the lungs results, which through the increased blood pressure in the lung capillaries causes a further claim upon the injury of the right ventricle. This condition of the lung—Lungenstarre—as well as stasis in the general venous system, must have cyanosis and dyspnea as results, as we find them described by a number of authors in literature.

3. Upon the basis of our analysis of the literature and of our own cases, we conclude that the assertion made by authors that in pulmonary conus stenosis, an accentuation of the second pulmonary sound proves the existence of a coëxisting open ductus Botalli, although possible, yet appears supported by absolutely no facts. On the contrary, we find in the literature in two cases of conus stenosis with open ductus Botalli, no accentuation of the second pulmonary sound. Against this assertion we believe that we may assume an open foramen ovale as sufficient reason to explain the accentuation of the second pulmonary sound. In support of this there attest eight cases of pulmonary stenosis where there was an isolated occurrence of the open foramen ovale, the second sound was accentuated.

There are cases in the literature as well as two of our own which tend to prove that the accentuated second pulmonary sound is not due to a closing of the pulmonary semilunar valves. It might be possible that in these cases a tone of other origin, *e. g.*, an auricular sound could be mistaken for a second pulmonary tone. We must therefore refuse to accept the assertion that an accentuated second pulmonary tone in congenital pulmonary stenosis proves the existence of an open ductus Botalli, and affirm that such an accentuation is diagnostic of an open foramen ovale.

4. The statistics of the cases of pulmonary stenosis show that we can demonstrate a narrowness of the aorta also with the pulmonary stenosis, in a series of cases. This coördinate phenomenon of the pulmonary stenosis, probably due to an arrest in intrafetal growth appears, as far as the statistics do not lie, to be a particular cause for the frequent occurrence of the complicating pulmonary tuberculosis. This fact would agree better with the postulated anemia of the lungs—because such a condition could be caused by a narrowing of the vessels—as well as with the assertion of Benecke, who pointed out in an especial manner the frequency of the congenital narrowness of the vessels in tuberculosis.

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388 FRANKLIN STREET.

CLINICAL REPORT.

Cancer of the Clitoris.[1]

By CHARLES E. CONGDON, M.D., Buffalo.

THE extreme rarity of primary cancer of the clitoris has led me to present this case. I have been able to learn of only two authenticated cases of this kind, and those were reported by Howard Kelly, of Baltimore.

This affection should not be confounded with cancer of the vulva in its latent stages, secondarily involving the clitoris, or with syphilitic papilloma, for these are more common affections.

Mrs. W., aged 69 years; English. Had the various affections of childhood before her fourteenth year, when she began her menstrual function, which continued painlessly and with regularity except when interrupted by pregnancy, to her 45 year, at which time it ceased, she passing through the climacteric period safely. Was married at the age of 18 years, and between her 20th and 39th years bore six living children; the births were normal and easy, instrumentation was not indicated or used. Father died at 68 years, cause unknown; mother at 60 years, from some intestinal trouble, the exact nature of which is unknown. Husband died at 67 years from cancer of the duodenum.

Between her 66th and 67th years, Mrs. W. began to suffer at intervals from itching of the vulva, which she attributed to some kidney or bladder trouble and was treated by various physicians, who failed to examine her and although a very intelligent woman, a warty growth of the clitoris did not, in her opinion, have any significant bearing upon the now incessant itching, burning and ichorous discharge; it was not until sitting upright or locomotion was rendered almost impossible that she submitted to an examination, and was then informed by her physician that an operation was indicated.

She entered my hospital in September, 1901, and upon examination the growth was found to be entirely of the clitoris, which measured 3 by 4 centimeters in diameter, protruding

1. Presented at the Buffalo Academy of Medicine, Section on Obstetrics and Gynecology, April 22, 1902.

CONGDON : CANCER OF THE CLITORIS.

from between the vulva 2 centimeters. The vulva was shriveled and showed evidence of long continued pruritis.

The central portion of the growth was necrotic and gave rise to an offensive sero-purulent discharge. The labiæ were not involved and apparently it originated entirely from the clitoris. The inguinal glands on both sides were noticeably enlarged. Her general health had not suffered until recently, but at this time she complained of sharp pains which radiated from the cancerous clitoris to both inguinal regions. This pain was so severe for several weeks previous to her visit to me, she had required an opiate at night in order to secure the necessary sleep.

Microscopic examination of a fragment of the growth demonstrated it to be carcinoma. The disease was extirpated by an irregular triangular incision beginning at the upper border of the mons veneris and extending in a line downward, somewhat curved away from the growth and including the greater part of the labia on both sides; and while the vestibule was not involved, yet the incision and extirpation included as much of it as was possible without interfering with the function of the urethra: this included all tissues down to the fascia and bony structures.

At the same time an incision was made on both sides parallel with Poupart's ligament, extending nearly to the anterior superior spine of the ilium and the inguinal glands were completely removed; a small bridge of cutaneous tissue was left at the lower angle; a few bleeding points required ligation. The extirpation of the clitoris together with the surrounding structures required a flap-sliding operation in order to completely cover the denuded area. The patient made an uninterrupted recovery and there has been no recurrence of the growth, after eleven months.

1034 Jefferson Street.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine.

Reported by F. W. McGuire, M. D., Secretary.

ANNUAL meeting held at the academy rooms, Public Library Building, Tuesday, June 17, 1902.

The president, Dr. Charles G. Stockton, called the meeting to order at 8.45 p.m.

The minutes of the last annual meeting were read and approved.

The secretary of Academy and council presented the following report for the session of 1901-1902, which was on motion received and ordered to be spread on the minutes.

ANNUAL REPORT OF SECRETARY.

During the summer a program was prepared for the entire season and a copy of same sent to each member of the Academy.

The past few years the attendance has gradually decreased, and this year a special effort was made to have papers read by men of note from various other cities. The plan, in a measure, has been successful. The average attendance at stated meetings was increased from 39 to 44. The average attendance of various sections: Medical from 36 to 41; obstetrics, 27 to 34; ophthalmology, decreased from 26 to 13; surgery, from 20 to 27; pathology, from 24 to 46.

During the past year we have added more new members to the Academy than has been done on any previous year, due principally to the effort of Drs. Stockton and Wende. The number of new members being 31, and there has been only 6 members dropped for nonpayment of dues. While there has been an increase in the attendance this year over last, it is still below what I think we ought to expect.

There is another method, I believe, by which we can still further increase our attendance. We have in Buffalo some 700 physicians who are eligible for membership in the Buffalo Academy of Medicine, and of these only 200 are members. Now, if we can double our membership I think it fare to assume that our attendance will be correspondingly increased, providing, of course, we keep up the high standing of our meetings.

There has been five stated meetings. In September, section of medicine—Intestinal Dystrypsia, J. C. Hemmeter; Treatment of pneumonia, De Lancey Rochester. Attendance, 30.

In November, section of Ophthalmology—The operation for extraction of cataract, as originally devised by Daviel, A. A. Hubbell. Attendance, 32.

In January, section of Obstetrics and Gynecology—In pelvic suppuration when shall we operate by the abdomen and when by the vagina? William R. Pryor, New York City. Attendance, 58.

In March, section of Surgery—The advantage of early surgical intervention in borderland cases, Roswell Park. Attendance, 40.

In May, section of Pathology—Dysentery and its causes, Simon Flexner, Professor of Pathology University of Pennsylvania; Notes on a few cases of smallpox from the Buffalo epidemic of 1901-1902. Stereopticon, David E. Wheeler. Attendance, 60.

The council had 7 meetings, with an average attendance of 11 2.7.

ANNUAL REPORT OF TREASURER.

CHARLES S. JEWETT, M. D., Treasurer.

June, 17 1902.

CURRENT FUND.

Balance on hand, June 11, 1901	$263.24	
Initiation fees, twenty-nine resident Fellows	290.00	
" " three non-resident Fellows	15.00	
Dues received from Fellows	774.05	
" " " estates of deceased Fellows	25.12	
Received for use of telephone	15.18	
Interest Fidelity Trust Company	12.30	
		$1,394.89

EXPENSES.

Printing, postage and stationery	$255.78	
Janitor's services	49.00	
Collectors' fees	18.00	
Stereopticon	20.00	
Telephone	50.28	
Exchange on foreign checks	.30	
Guests' expenses, medical section ($25 for last year)	47.50	
" " surgical section	71.00	
" " obstetric and gynecological section	17.16	
" " pathological section ($36 for last year)	106.00	
" " ophthalmological, laryngological and otological section (20 for last year)	53.50	
Rent	49.00	
Total expenses	$737.52	
Transferred to permanent fund	270.00	
		1,007.52
Balance on hand, June 11, 1902		$ 387.37
To be transferred to permanent fund, July 1, 1902		45.00
Actual working balance		$ 342.37

PERMANENT FUND.

Amount of fund, June 11, 1901	$1,396.89
Transferred from current fund	270.00
Interest Western Savings Bank	43.56
	$1,710.45

Increase of permanent fund in past year, 22 per cent.
Increase of permanent fund in past two years, 221 per cent.

Total receipts from all sources during the year	$1,175.21
Total expenses	737.52
Net increase of assets	$ 437.69

SECTION OF OBSTETRICS.

W. H. MANSPERGER, M.D., Secretary.

Meetings of this section were held on the following dates:

September 24, Some experiences in obstetrical cases, Eli Long. Attendance, 28.

October 29, Concerning the diagnosis and treatment of the various forms of septic pelvic diseases, Fernand Henrotin, of Chicago. Attendance, 39.

November 26, Pelvic lesions in their relation to destructive effects upon mental disturbances, A. T. Hobbs, of London, Ont. Attendance, 32.

December 24, Concerning the management of labor cases, Stephen Y. Howell. Attendance, 15.

January 28, stated meeting of Academy, Wm. R. Pryor, New York City. Attendance, 58.

February 25, Some rare and odd cases and experiences in pelvic and abdominal surgery, C. C. Frederick; Retrodisplacements of the uterus in young girls and unmarried women—their frequency and best methods of treatment, Herman E. Hayd. Attendance, 36.

March 25, Ectopic pregnancy, H. D. Ingraham; Treatment of placenta previa, M. D. Mann. Attendance, 37.

April 22, The prophylaxsis of uterine cancer, L S. McMurtry, of Louisville. Attendance, 38.

May 27, Thoughts upon breech presentations, Dr. Van Peyma; Fibroid tumors, C. C. Frederick. Attendance, 19.

Dr. Schroeder was elected chairman; Dr. Stadlinger, secretary.

Average attendance, 33 5.9.

SECTION OF OPHTHALMOLOGY, OTOLOGY, RHINOLOGY, AND LARYNGOLOGY.

A. G. BENNETT, M.D., Secretary.

During the season seven scientific meetings where held and one to discuss the question as to whether the section should be discontinued.

At the first meeting, September 16, a paper was presented by Swan M. Burnet, of Washington, D.C., on the question of Methyl alcohol and its effect on vision. Casey A. Wood, of Chicago, read a paper at the second meeting, October 11, on Exophthalmic Goitre. Both of these papers were scholarly, as the section had every right to expect they would be, being read by two of the foremost ophthalmologists of this country. The section regrets that these distinguished gentlemen were greeted by so small an audience and particularly that the council was only represented by one member beside the section chairman and secretary.

At the other meetings papers were presented by Drs. Cott, Hubbell, Howe, Hinkel, Grover W. Wende and Max Keiser,

and interesting cases were presented by Drs. Clemesha, Blaauw, Cott, Hinkel, Flagg and Hubbell. The average attendance, 13 1.6.

At the last meeting held on Monday, May 26, it was decided to continue the section but to hold only 4 meetings during the session, and to hold these on the fifth Tuesday, which occurs every third month.

E. E. Blaauw was elected chairman; F. H. Millener, Secretary, for the ensuing year.

SECTION OF SURGERY.

H. C. ROTH, M.D., Secretary.

The Surgical Section held eight regular meetings and entertained the Academy once. The meetings were fairly well attended, there being an average gain of 25 per cent. over the attendance of last year.

Beside having many excellent papers by our own members, the section had the pleasure of listening to papers by C. A. Hamann, of Cleveland, O.; Charles H. Frazier, Philadelphia, Pa.; Ramon Guiteras, New York; Harvey W. Cushing, Boston, Mass.; and Geo. W. Crile, Cleveland, O.

The average attendance was 27.

SECTION OF PATHOLOGY.

IRVING PHILLIP LYON, M.D., Secretary.

During the session of 1901-1902, the Pathological Section held seven regular monthly meetings and furnished the program for one stated meeting of the Academy, making eight meetings in all, with an average attendance of 46 members, representing an average attendance of about 20 per cent. of the total membership of the Academy.

A total of eleven papers were read before the section; five by members of the Academy and six by invited guests from other cities, as follows: 1 from Ithaca, 1 from Philadelphia, 1 from New York City, 1 from Montreal, and 2 from Chicago.

Pathological specimens were exhibited by four members and by one invited guest, Dr. Loeb, of Chicago, and in addition during the year, reports of cases were made by one member and by one invited guest, Mr. Eugene Horbon, student of medicine in the University of Buffalo.

Attention is directed to the fact that a majority of the papers read were presented by distinguished guests of the Academy from various other cities in accordance with the policy adopted by the council. It is believed that this policy has stimulated interest in the meetings and its continuance is recommended by your secretary.

SECTION ON MEDICINE.

A. E. WOEHNERT, M.D., Secretary.

During the year 1901-1902 the Medical Section held eight meetings. One meeting, that of April 8, was adjourned, there being no quorum present.

We endeavored during this year to awaken interest in the Academy by bringing in men from out of town. We met with a certain degree of success. We also set apart one night for a clinic night, inviting members to bring interesting cases. The members seemed to take kindly to the innovation, more than the average number being present. Five interesting cases were demonstrated.

The following papers were read and discussed: Intestinal dystrypsia, J. C. Hemmeter; Treatment of pneumonia, De Lancey Rochester; Dyspeptic asthma, Max Einhorn; Recurrent vomiting, A. A. Jones; Some facts and fallacies concerning tuberculin, Dr. Pryor; Diagnosis of gastric cancer, A. L. Benedict; The capillary area, Eli Long; Pneumococci and cardiac toxemia, Henry Elsner; Baby farming in Buffalo, J. Pohlman; Observation upon two interesting cases of the local manifestation of hysteria in joint and muscle, Prescott Le Breton; Jaundice, with report of cases, J. M. Anders; Heredity, Wm. C. Krauss.

Excluding the first meeting, which was a stated meeting, there were 310 members present at the seven meetings; an average of 41 3.7.

REPORT OF TRUSTEES.

Annual Meeting June 17, 1902.

Since the last annual meeting of the Academy little has transpired in the way of change, save the recent rise in the world, which called us from basement to third floor. Our present quarters are in many respects preferable to those so recently abandoned. Dry, airy, commodious and easy of access through the medium of a modern electric elevator. The new rooms present an attractiveness which will be increased when certain contemplated improvements have been made.

Aside from a small stipend to be paid the elevator man, for his extra hours of labor, the expenses incurred by the Academy are not to be enhanced. The favorable conditions which have permitted a steady, healthy growth of our sinking fund are to continue, and with each passing year, the vision of a permanent ideal home for the Academy now seems less chimerical. The disposition of the various properties of the Academy is practically that of a year ago.

Our books are cared for, till such time as we may require them, by the Grosvenor Library trustees, to whom the privilege of using such as may be desired has been accorded.

In the keeping of the board of U. S. Pension Examiners, at their rooms in the new Post Office building: 1 upholstered

chair; 1 long oak table; 1 short oak table; 18 hardwood arm chairs, 1 couch upholstered in leather. These are to be kept in good order and subject to demand.

The remainder of the Academy effects are at present distributed between the basement rooms just abandoned and those now occupied on the third floor. Aside from certain repairs to our chairs, the maintenance of the property during the ensuing year will apparently necessitate no drafts upon the treasury.

STEPHEN Y. HOWELL, Chairman.
J. W. GROSVENOR,
M. D. MANN.

The tellers, J. W. Grosvenor and F. W. Barrows, reported the result of election as follows: president, Herman E. Hayd; treasurer, Charles S. Jewett; trustee, Stephen Y. Howell.

The retiring president, Charles G. Stockton, made a few appropriate remarks in reference to the work of the Academy during the past year and its future, and then read his annual address, entitled, Acute gangrenous pancreatitis, traumatic and otherwise. (To be published.)

The auditing committee reported having compared the report of the treasurer with the books and vouchers and found them to be correct.

Dr. Henry R. Hopkins reported that the committee of investigation of St. Mary's Orphan Asylum and Maternity Hospital was making progress, but requested further time, and on motion more time was granted.

Dr. Julius Ullman reported a case of carcinoma of cardiac end of the stomach on which a gastrostomy was performed, and gave an exhibition of the administration of food to patient.

The newly elected president, Dr. Hayd, was duely installed into office and made a few appropriate remarks, thanking the members for having elected him to such an important office in the Academy.

It was moved and seconded that a vote of thanks be extended to the president for his masterly address. Carried.

A vote of thanks was extended to Dr. Charles S. Jewett for the successful way in which he managed the finances of the Academy; also a vote of thanks was extended to the secretary for his work during the year.

Attendance, 42. Adjourned at 10.30 p.m.

Memorial Meeting Held by the Medical Society of the County of Erie.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

DR. THOMAS LOTHROP.

PURSUANT to a call of the President the Medical Society of the County of Erie, held a special meeting in the parlors of the Y.M.C.A., Pearl and Mohawk Streets, at 5 p.m., August 9, 1902, in memory of Dr. Thomas Lothrop, who died at his residence in Buffalo, August 7, 1902, aged 66 years 3 months and 22 days.

In the unavoidable absence of the president and the vice-president, the secretary, Dr. Franklin C. Gram, called the meeting to order and, on motion of Dr. Hopkins, Dr. Conrad Diehl was elected chairman, *pro tempore*.

Dr. Diehl briefly stated the object of the meeting, and in the course of his feeling remarks said Dr. Lothrop was a former president of this society and had, for many years, occupied a prominent position in the medical profession as well as in the community and it was befitting the occasion that so many representative physicians were in attendance. He had known Dr. Lothrop for about forty years and respected him as a man of good judgment and high professional attainments.

Dr. H. R. Hopkins moved that a committee of five be appointed to prepare a suitable memorial and present it to the meeting for approval. The motion was adopted and the chair appointed as such committee Drs. Henry Reed Hopkins, John Hauenstein, William Warren Potter, Devillo W. Harrington and Joseph Fowler.

The committee withdrew and soon presented the following:

In Memoriam.

THOMAS LOTHROP, M.D., 1836-1902.

Forasmuch as it hath pleased Almighty God, in His wise providence, to take out of this world the soul of our deceased brother, Dr. Thomas Lothrop, we, the Medical Society of the County of Erie, therefore place upon record our testimony and our appreciation of the noble qualities of mind, character and person which distinguished in a singular and remarkable degree his professional career.

And chiefly are we bound to praise his steadfast loyalty and devotion to the highest ideals of professional and personal

life and conduct. He was ever a loyal friend, an open champion, an ardent advocate of all that was purest, most elevating, most ennobling in the profession of medicine which he ever adorned, and which in turn rewarded him with its chiefest honors.

Also, we gladly testify that in like manner as his professional ideals were high and dignified, so were his sympathies and charities broad and discriminating; having a lively sense of the uplifting power of education, he constantly exercised himself in affording to others the opportunities of self-development, the high possibilities of which his own person and career so well illustrated.

Doctor Lothrop was, as a citizen, courageous and inflexible in support of municipal progress, as a physician successful in an unusual degree not only in attracting and retaining the confidence of a large and wealthy patronage, but also in winning and holding the confidence of his colleagues, by his wise, conservative, yet progressive practice; as a man an illustrious example of the genial, chivalrous christian gentleman. May light perpetual shine upon him!

HENRY REED HOPKINS,
JOHN HAUENSTEIN,
WILLIAM WARREN POTTER,
DEVILLO W. HARRINGTON,
JOSEPH FOWLER,
} Committee.

The Medical Society of the County of Erie,
Buffalo, August 9, 1902.

In moving the adoption of the memorial Dr. Hopkins added a brief personal tribute. He also said that it had long been contended that a physician must not deal with anything but medicine. Dr. Lothrop since early life did not hesitate to take his stand as a citizen. He soon demonstrated that he measured up to the requirements and showed that a professional training aptly fits a man for the duties of citizenship.

Dr. William Warren Potter, in seconding the motion of Dr. Hopkins, stated that it was his privilege to enjoy Dr. Lothrop's acquaintance for more than twenty-five years, and he could add little to the memorial which succinctly presents some of his principal characteristics. Dr. Lothrop was a professional example worthy of emulation. He stood for everything ennobling. For a period of ten years, the speaker was associated with Dr. Lothrop in the conduct of the medical journal and thus learned to know him in a more intimate relation than otherwise would have been the case. Dr. Lothrop always advocated a strong policy and insisted on a high standard.

The example of such a man was something to remember, something to revere, something to follow.

Dr. J. Henry Dowd gave some reminiscences of the period when Dr. Lothrop occupied the chair as professor of obstetrics at Niagara University. He spoke of his commonsense lectures and his practical methods.

Dr. J. B. Coakley alluded to his work as director of the State Hospital, his thirty years connection with the Church Home, and some of his many public and private charities.

Dr. H. D. Ingraham became acquainted with Dr. Lothrop immediately after coming to Buffalo. In addition to what had already been mentioned the deceased was a great friend of poor students and young practitioners, some of whom were educated at Dr. Lothrop's personal expense.

Dr. D. W. Harrington, alluding to his strong character, said if Dr. Lothrop was your friend you knew it; if your enemy, you would have no doubts on the subject. He was a man of integrity and truthfulness.

Dr. A. A. Hubbell said he had been associated with Dr. Lothrop for many years. The doctor was a self-made man, not only in medicine but in other accomplishments. He stood for the highest and best, was uncompromising in establishing and maintaining the highest standard for Niagara Medical College. He had excellent business qualities, and arranged the affairs of his department with such foresight that the maternity which he established proved a benefit to the college and the community, as well as a profitable investment.

Dr. W. G. Taylor said he was the young practitioner's best friend and always straightened out the most difficult complications without compromising anybody.

Dr. P. W. Van Peyma, remarked among other things, that he was one of the first associates of Dr. Lothrop in the proprietorship of the Journal, and although they sometimes disagreed on questions of policy, yet they always remained friends. He was a man for whom he had the highest respect.

The chair then put the motion on the adoption of the memorial, and it was carried without division.

On motion of Dr. Callanan it was ordered that the society attend the funeral in a body, and then the meeting adjourned.

PROGRESS IN MEDICAL SCIENCE.

Physiological Chemistry.

By JOHN A. MILLER, Ph. D., Buffalo, N. Y.

METT'S METHOD OF ESTIMATING PEPTIC ACTIVITY.

ALEXANDER A. SAMOJLOFF (*Pflüger's Arch.*, 85, *J. Chem. Soc.*, 80.) Mett's method consists in measuring the decrease in length of cylinders of egg white coagulated in capillary tubes, which occurs under the influence of artificial digestive juices. The method is recommended as an accurate one. The law that peptic activity is proportional to the square root of the amount of pepsin present is shown to be true, except when the amount of pepsin is very great; with high concentrations, the figures found are less than those calculated.

VARIATION OF THE QUANTITY OF THIOCYANATE CONTAINED IN HUMAN SALIVA AND ITS CAUSES IN HEALTH AND DISEASE.

JUL. A. GROBER (*Chem. Centr.*, 1901; *J. Chem. Soc.*, 80.) Potassium thiocyanate is found in the human body only in the saliva. (This statement is not true, as it exists in both the blood and the urine.—J. A. M.) It is not formed by the decomposition of the saliva, but is actually secreted, and the quantity diminishes with the duration of the secretion. The quantity present in the saliva is not affected by change of diet in the case of healthy persons or by the use of tobacco by non-smokers. The secretion of the thiocyanate is probably dependent on the condition of the organism in respect to the albumin decomposed and utilised, and where this is small in amount, as in severe cachectic cases, little or no thiocyanate is secreted.

THE FUNCTIONS OF BILE AS A SOLVENT.

BENJAMIN MOORE and William H. Parker (*Proc. Roy. Soc.*, 1901; *J. Ch. Soc.*, 80.) Bile acts as a solvent in two ways: (1) it dissolves lecithin, and to a less extent cholesterol; it thus aids the excretion of these otherwise insoluble substances by the liver cells, and their carriage to the intestine; (2) it dissolves both free fatty acids and soaps, and thus renders the absorption of these substances easier. The solvent properties are chiefly due to the bile salts, but in the case of the fatty acids and soaps the amount dissolved is greatly increased by the simultaneous presence of lecithin.

FEBRILE CHANGES IN THE CHEMICAL COMPOSITION OF BLOOD.

KARL RITTER VON STEJSKAL (*Chem. Centr.*, 1901; *J. Ch. Soc.*, 80.) The blood of fever patients has been found to contain less albumin, fat, cholesterol, iron, and chlorine, and to yield a smaller quantity of dry substances than normal blood. On the other hand, the quantities of water, calcium, potassium, and ash were in excess of the usual amount, whilst the amounts of lecithin and sodium were normal. The blood serum showed a decrease of albumin, substances soluble in ether, chlorides, and dry substances, but contained a greater quantity of potassium, and yielded a larger ash. The fact that in the febrile state the red corpuscles contain less albumin, lecithin, and cholesterol, but are richer in water and salts can only be due to imbibition of solutions containing salts (plasma) and especially chlorides. The red corpuscles had increased in weight, whilst the plasma had correspondingly decreased.

ANALYSIS OF LIQUID OBTAINED FROM A HYDATID CYST OF THE LIVER.

F. MALMÉJAC (*J. Phar.*, 1901; *J. Ch. Soc.*, 80.) The liquid (1012 c.c.) was perfectly colorless, limpid, and of acid reaction, and contained 13 grams of solid matter per litre, of which sodium chloride forms 5.8 grams, urea 2 grams, and calcium oxide 1 gram. In addition small quantities of serum-albumin, sulphates, phosphates, and acetone are present.

VARIATIONS IN THE COMPOSITIONS OF THE BILE.

R. L. CRACIUNU (*Compt. Rend.*, 1901; *J. Ch. Soc.*, 80.) In young animals, the solids are more abundant than in old ones. In thin animals, the solids are more abundant than in fat ones. The amounts of fat and lecithin in the bile increase with age.

VARIATIONS IN THE AMOUNT OF THIOCYANATE IN HUMAN SALIVA.

E. C. SCHNEIDER (*Am. J. Physiol.*, 1901; *J. Ch. Soc.*, 80.) In smokers, the average percentage of potassium thiocyanate is 0.013; in non-smokers, 0.003. The amount diminishes on prolonged stimulation of the salivary glands. The parotid saliva is always richer than the submaxillary saliva of the same person at the same time.

PROTEIDS OF THE THYMUS.

W. Huiskamp (*Zeit. Physiol. Chem.*, 1901; *J. Ch. Soc.*, 80.) Nucleo-histon is the most abundant proteid in thymus; it comprises 69.4 per cent. of the total proteids; 18.7 per cent. of nucleo-proteid, and 11.9 per cent. of other proteids are present. The characters and composition of nucleo-histon and nucleo-proteid are fully described, together with their compounds with calcium, magnesium and sodium. Nucleo-histon contains 3.7 and nucleo-proteid, 0.9 per cent. of phosphorus. The influence of these proteids on the coagulation of blood plasma was found to be much the same as described by Hammarsten with solutions of fibrinogen.

ARTIFICIAL MODIFICATIONS OF TOXIN.

James Ritchie (*J. Hyg.*, 1901; *J. Ch. Soc.*, 80.) Tetanus toxin under the influence of hydrochloric acid readily loses its virulent properties, but the capacity of producing immunity remains. The less poisonous substances produced are probably toxoids. Sodium hydroxide or carbonate has similar power. Ricin is resistant to the action of hydrochloric acid, but when toxicity is destroyed, the capacity of producing immunity remains. Abrin is also resistant to the acid, but is relatively susceptible to sodium hydroxide; much the same is true of diphtheria toxin, although the power of producing immunity remains as in the other cases.

HIPPURIC ACID METABOLISM IN MAN.

Carl Lewin (*Chem. Centr.*, 1901; *J. Ch. Soc.*, 80.) A healthy man secretes daily from 0.1 to 0.3 gram of hippuric acid. This amount is increased by feeding on dextrose, by increase in intestinal putrefaction, or by administration of foods rich in nuclein, such as sweetbread, this being, however, attributed to the increase of putrefaction in the intestines, since nucleic acid does not produce the effect. In gout and diabetes, the amount is normal; in febrile conditions, in kidney disease, and in perityphlitis the amount of hippuric acid rises.

DIGESTIVE POWER OF GASTRIC JUICE.

Albert Fronin (*Compt. Rend.*, 1901; *J. Ch. Soc.*, 80.) Variations in the digestive power of gastric juice depends chiefly on

the amount of hydrochloric acid. Proteid food increases the secretion of pepsin.

NON-PERMEABILITY OF THE WALL OF THE URINARY BLADDER. OTTO COHNHEIM (*Zeit. Biol.*, 1901; *J. Ch. Soc.*, 80.) In the intestinal wall, the stream of liquid is in one direction only; in the peritoneum, diffusion resembles that which occurs through parchment paper. In the urinary bladder, the liquid contained within it alters no more than it would in a glass vessel. The bladder wall is not a diffusion membrane, or a semi-permeable membrane, and is not permeable to water. These differences furnish evidence of the "physiological component" in the movement of liquid through living animal membranes. As soon as these three membranes are poisoned with sodium fluoride the differences between them disappear, and they all behave like diffusion membranes.

Genito-Urinary and Syphilitic Diseases.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

URIC ACID: ITS SOURCES AND EFFECTS.

JAMES TYSON (*New York Med. Jour.*, March 15, 1902.) The only form in which uric acid can exist in the blood is in the shape of a quadriurate. (Roberts Croonian lectures.)

The quadriurate is a very soluble, unstable combination with sodium. This compound holds the uric acid in the blood fluids of the body. It reacts readily with the sodium carbonates of the blood, forming a biuret, which is not easily soluble and which sometimes deposits in needlelike crystals in the cartilages, ligaments and fibrous tissues of the body. This compound has been found in abundance in the blood during gouty seizures, in chronic nephritis, anemias and leucocytosis.

Urea is said to be the ultimate product of nitrogenous metabolism and its remote source is the food albumins and to a less extent the fixed albumin of the tissues. Some observers consider that uric acid is formed out of urea in the kidneys.

Zalesky, Levison and Kolisch regard the kidneys as important uric acid forming organs. Urea is formed by the amide-acids into which albumins are converted during tryptic digestion and putrefaction and by the action of acids and alkalies. The larger part is formed from the ammonium salt of paralactic acid

in which albumin nitrogen is set free. A fermentative, synthetical process forms urea from the paralactate and carbonate of ammonium. Urea also is formed from the albumin by hydrolysis. Drechel says that 10 per cent. of the urea is thus formed. The principal source of urea is paralactic acid, and the liver is the chief seat of its formation, although it is formed synthetically in other organs.

Whence comes uric acid?

Uric acid is one of the end products of animal metabolism and is remotely derived from ingested food. Modern study indicates that uric acid in man is derived from the nucleins of ingested food, from the body cells, especially leucocytes, the change taking place in all the organs of the body, particularly in the spleen and lymphatic glands. It is likely that uric acid is formed from disintegrating cells in every part of the body, most abundantly in the glands and lymphatics.

Its Clinical and Pathological Significance.—Uric acid is not poisonous, the harm it does is local: (1) it is deposited in the kidney and urinary passages, forming calculus and gravel; (2) it is deposited in the joints as a biurate; (3) uric acid accumulates in the blood (as a biurate) in gout, chronic lead poisoning, chronic nephritis, leucemia and pernicious anemia.

How does uric acid get into the situations named? Is it harmless? If so, what agent produces the symptoms associated with its presence?

The formation of calculus and gravel is the easiest explained of all the clinical facts. It comes from the kidney and is precipitated from the urine by an over saturation of the urine with the uric acid and its salts, especially the biurate. Scanty and high specific gravity of the urine are found where such deposits occur. The production of uric acid is not necessarily increased, the quantity of water is greatly reduced, so that there is not enough to hold it in solution.

How is it deposited in the fibrous tissues?

There may be an abnormal quantity of the biurate in the blood. A stasis of the lymph current favoring precipitation.

The recent views held as to the rôle played by uric acid limit its harmfulness to the formation of concretion and credit the alloxuric basis with the harmful phenomena of the so-called uric acid lesions; that the formation of uric acid is beneficial and not baneful. It deposits with insufficient solvent.

Treatment.—Abundance of alkaline or plain water, especially

between meals, and the exclusion of proteid foods to a degree sufficient to eliminate uric acid from the urine, together with a liberal amount of out-door exercise, is the treatment for all uric acid manifestations. The best treatment for articular deposits and swellings is massage and hot baths.

Treatment recommended by Crofton: there are two indications (1) a reduction in the nuclein catabolism; (2) a raising of the processes of oxygenation. To attain the first object avoid everything that produces leucocytosis, such as quinine, pilocarpine, atropine and proteid foods. Overeating should be forbidden.

In a true uric acid case there will be excessive nuclein-catabolism despite all we may be able to do, in the very nature of the taint, and restrictions in diet will not be of permanent benefit; the chief point of attack will be in the direction of raising oxidation. A uric acid case should be treated as an anemic case in all measures employed to promote the oxygenation powers of the blood, *i. e.*, the production of an increase in the red blood corpuscles and of the hemoglobin and its chief oxygen carrier—iron.

Give iron, arsenic and oxygen.

HEMATURIA.

WILLIAM L. OTIS (*New York Med. Jour.*) states that blood in the urine indicates a lesion in the urinary tract—its significance may be trifling or serious. Usually its presence may be determined by the "naked eye" or so scanty as to require other means for identification; one part of blood to 1500 of urine will produce a smoky tint; 1 to 500, a bright cherry red. If a small quantity of liquor potassium be added to the urine and then heated to the boiling point, a bright red or brownish green sediment is formed.

A simple test, not strictly reliable, because other substances besides blood may give reaction, consists in making an emulsion of equal quantities of guaiac and oil of turpentine, the urine carefully added; if blood is present a bright blue precipitate will be formed.

The best and most positive test for blood is the microscope. If the corpuscles have been in the urine but a short time, they will have the appearance of those from the veins. If they have been exposed for some time, they become considerably altered.

In dilute, alkaline urine the corpuscles are soon destroyed. Add a concentrated solution of sulphate of sodium and they become visible again, appearing angular and distorted.

Blood in the urine may be definitely determined by the spectroscope. If blood be found in the urine, the next step is to locate its source. To do this divide the urinary tract into four portions: (1) Meatus to compressor muscle: If the bleeding point is in this division the flow will be continuous, or it will exude from the meatus as there is no obstacle to its exit. Pass the urine in two portions and the first will be stained and the second clear. Bleeding may be located by sectional pressure along the urethra, or its source may be found by the urethrascope; (2) the prostatic or posterior urethra: if the point of hemorrhage is in the prostatic urethra the outflow is checked by the external sphincter and it is passed in urination, mixed urine and blood; if the amount be small it appears at the beginning and the end of urination. If the hemorrhage is profuse it flows backward into the bladder and colors the urine uniformly. The chemical reaction of the urine is not a reliable guide for if the hemorrhage be profuse the blood serum tends to neutralise the acid reaction of normal urine. If the alkalinity be due to ammoniacal fermentation, it has taken place in the bladder, for this condition does not occur in the kidney. If there are no clots in bladder, it is readily freed from renal blood. Fresh bladder hemorrhage is bright red in color; if the stain is due to clots or kidney hemorrhage, it is dark red or brown.

The normal bladder absorbs very slowly, but if there be a lesion of the mucous surface absorption is rapid, so that if a solution of potassium iodide be introduced into the bladder the characteristic reaction of iodine is shown in the saliva. The lesion may be located by the use of the cystoscope, or it may be determined whether the hemorrhage is from the bladder, or either ureter. The trigonum and mouths of the ureters should be carefully examined.

If the bladder and urethra be excluded as the source of the bleeding, then it must be from the superior portion of the urinary tract. Kidney hemorrhage is indicated by the uniformity and darker color of the urine. Kidney hematuria may be intermittent, due to blocking of the ureter by a clot, the other kidney secreting normal urine. This is almost pathognomonic of renal hemorrhage. Increased amount of blood in the morning indicates renal hemorrhage. Blood clots are pathognomonic of

renal blood. Long, round clots and casts of the pelvis and calites render the diagnosis absolute. A large kidney or a tumor indicates kidney hemorrhage.

HORWITZ (*Jour. Amer. Med. Assn.*, June 21, 1902.) (1) Primary tuberculous infection of epididymis and testicle may and often does occur; (2) infection of the testicle usually secondary to that of the epididymis; (3) these infections take place through the circulation; (4) secondary involvement of the organs may follow from tuberculosis of other organs; (5) invasion of testicle may be acute or chronic, simulating syphilitic or malignant disease; (6) in doubtful cases the tuberculin test should be applied; (7) radical surgery should be applied in the primary form; (8) in doubtful cases with hydrocele the fluid should be examined for tubercle bacilli; (9) in extensive co-existing tuberculous lesion of other organs, radical operations are contra-indicated.

Therapeutic Progress.

EDITED BY NELSON W. WILSON, M. D., Buffalo, N.Y.

TREATMENT OF ERYSIPELAS.

N. G., in the *Philadelphia Med. Jour.*, suggests this procedure in the treatment of erysipelas, which in spite of the author's initials is very good:

The affected area is first inclosed in a painted ring of tincture of iodine. The ring is not to be started at the margin of the reddened area, but from two to three inches from it, and a sufficient number of coats should be applied to cause a slight desquamation of the upper layers of the skin. At the same time the whole surface inclosed in the ring is to be covered with an ointment of ichthyol, about one dram to one or two ounces of vaseline. This is covered with a piece of gauze, and a hot stupe applied, and changed about every four hours. At the end of twelve hours the ichthyol ointment is washed off and a fresh coat applied, and if the iodine has not had sufficient effect, one or two more coats are applied.

CARBOLIC ACID POISONING.

THE *Journal of Medicine and Science* says: "Whatever else you do in internal carbolic acid poisoning, give at once a large dose

of alcohol—whiskey, brandy, rum or gin will answer—and repeat it often."

EXPERIMENTS WITH ADRENALIN.

ELSBERG, in *American Medicine*, gives a very comprehensive report of a series of experiments with adrenalin chlorid as an addition to solutions for local anesthesia. He says: "Adrenalin chlorid, which is the active blood pressure-raising principle of the suprarenal gland recently discovered and investigated by Dr. Takamine, is now on the market as an amorphous crystaline powder or in the form of a 1-1000 solution. It is a powerful astringent, so that a drop of a 1-10,000 solution will blanch the conjunctiva in from 30 to 60 seconds.

"Elsberg has been carrying on a series of experiments with this new drug and finds that if a drop of a 1-1000 solution be injected under the normal skin a slight burning sensation is felt but no anesthesia occurs. Within one minute an area of skin about two inches in diameter becomes blanched and almost bloodless and remains so from six to twelve hours. The same effect will be observed if a 1-5000 to 1-15,000 solution be used, but with these weaker solutions the blanching appears only after a few minutes and disappears after three to six hours. After the blanching of the skin disappears the tissue apparently returns to its normal condition. No deleterious effects such as sloughing or subcutaneous ecchymosis ever followed these injections. In the course of the investigations cocain and eucain solutions containing adrenalin in the proportion of 1-5000 to 1-20,000 were used. It was found that the anesthetic properties of the cocain and eucain were preserved while the adrenalin caused the same blanching of the tissues as previously observed, which extended one to two inches beyond the area infiltrated.

"In performing minor operations under cocain to which 1-5000 to 1-20,000 adrenalin had been added only the larger vessels bled when cut across. The smaller vessels were contracted so tightly that no blood could escape from them and therefore there was no oozing. It was unnecessary to sponge off the wound a single time during an operation. The healing of the wound was not interfered with in any way. Upon theoretical grounds it was expected that secondary hemorrhage would take place in from three to twelve hours as the effect of the drug passed off. This, however, has not been the case in the 30 cases operated upon. Experience with the drug is still

small, and what will be the result in operations upon larger wounds remains to be determined.

"For small operations the addition of adrenalin chlorid is of distinct advantage in that it raises the blood pressure and overcomes the depressing effect of the cocain, at the same time it entirely does away with the oozing of blood from the wound."

In genitourinary work the writer has used adrenalin. It checks hemorrhage, but in several cases it was followed by secondary hemorrhage, rather free. Its use is now limited to circumcision in very young infants, and it is there applied in very weak solution when the open method is used.

ICHTHYOL IN PULMONARY TUBERCULOSIS.

Ichthyol (*Merck's Archives*) has been employed frequently in the treatment of pulmonary tuberculosis, with gratifying results. Dr. A. Mostkoff (*Allg. Med. Central.-Zeit.*, 1901, No. 76) has used it for a period of more than two years in this disease, administering it diluted with an equal quantity of water, in doses of 5 to 20 drops, thrice daily, in wine or black coffee as a vehicle, after meals. Symptoms of intolerance on the part of the digestive organs were not observed, and the author concludes that ichthyol is perfectly non-toxic. Fifty cases all told, are recorded. The treatment was a distinct success. The appetite improved under the use of the remedy, the patients often gained in weight, the annoying night sweats were relieved, the cough was quieted and fever reduced.

Ichthyol, according to the author, may be recommended as an efficient substitute for creosote and its derivatives in the treatment of pulmonary tuberculosis.

ACETANILID POISONING.

Stewart, F. T., (*Philadelphia Med. Jour.*) reports two cases emphasising the necessity of caution even when using acetanilid externally. The first patient had sustained an extensive burn of the left lower extremity. The doctor covered the raw surface with Thiersch's skin grafts taken from the right leg and thigh, and asked an assistant to dress the right limb while he completed the left. Early the next morning the patient became cyanotic, collapsed, and finally unconscious. On investigating

the cause for such an alarming episode he learned that the right leg had been copiously dusted with acetanilid.

The second patient was a baby, aged four months, suffering from intertrigo of the scrotum, buttocks and thighs. A neighboring physician advised a liberal application of the following powder: calomel, ½ dr.; bismuth subnitrate and acetanilid, of each, 2 dr. The following day intense cyanosis developed. With the first case fresh in mind, the cause of trouble was easily found.

Both cases reacted readily. Stewart says that in aseptic cases acetanilid has no place; in septic cases there are more efficient, less dangerous agents at command.

TREATMENT OF CHRONIC GASTRIC CATARRH.

EWALD (*International Medical Magazine*) says chronic gastric catarrh has undoubtedly two results which require therapeutic treatment: (1) Diminution in the production of HCl and pepsin, and (2) weakening of the motor function of the gastric musculature. For both we have an efficient treatment. Regarding (1), HCl should be prescribed in such quantities that the deficit will be fully compensated. One should give as large and as frequently repeated doses as possible. Ewald gives as many drops of dilute HCl in a half glass of water every ten minutes for three doses after meals as the patient can stand, *i.e.*, take without having a too sour taste in the mouth. A better way, if one cares to go that far, is to introduce a 0.02 per cent. HCl solution directly into the stomach through the stomach tube. He has given in this manner as much as 300 c.c. twice daily after the two larger meals. To increase motility of the gastric musculature, tincture of nux vomica stands first. In an infusion of cundurango bark (20 to 30 grams infused in 300 c.c. of water for twelve hours and evaporated to 150 c.c. by gentle heat) he puts 5 grams tincture of nux vomica and 5 grams dilute HCl. Massage, when performed by skilled hands—but only then—is valuable. Intragastric electricity is used whenever electricity is possible. One electrode is introduced into the well-washed stomach, the other over the belly. For stimulating influence, the faradic; for sedative, the galvanic (anode in the stomach) current four or five milliamperes, three to five minutes. He uses the common form of faradic apparatus with high tension and quick interrupter. The needle spray, preferably Einhorn's, is useful. To remove fermenting masses, wash out the stomach. To limit fermentation, the following:

℞ Resorcini resublim . . . . . 5.0 (75 gr.)
Bismuth salicylat . . . . . 10.0 (150 gr.)
Natrii bicarbonat . . . . . 15.0 (225 gr.)
Sacchari albi . . . . . 15.0 (225 gr.)

M. Sig.—Teaspoonful (small) every two hours.

The bowels must be regulated. The diet: patients should never eat until fully satisfied. Beverages should always be taken lukewarm, never too hot or too cold. The strong alcoholic and carbonated drinks should be prohibited. Proper care of mouth, teeth, etc., should not be neglected. Hard boiled eggs, stringy and tendinous meats, warm flesh, meat marbled with fat—sausage and the like—are all prohibited.

MUSCULAR RHEUMATISM.

G. Lyon (*Le Progrès Médicale*) gives this prescription for muscular rheumatism:

℞ Baume de Fioraventi . . . . . c. c. 20.0 (℥v)
Spt. camphoræ . . . . . 20.0 (℥v)
Spt. terebinth . . . . . 3.9 (mxlv)
Chloroformi . . . . . 5.0 (mlxxv)
Menthol . . . . . gm. 2.0 (gr. xxx)

Apply with light friction.

CHRONIC MALARIA.

In chronic malaria, M. Stephanopoulos uses this ointment twice a day, rubbed in with friction:

℞ Iodoformi . . . . . gm. 3.0 (gr. xlv)
Ext. belladon . . . . . 4.0 (℥i)
Ext. belladon . . . . . 4.0 (℥ij)
Ol. menth. pip . . . . . gtt. xx.

For the general condition he gives two of these pills before dinner at noon and two before supper:

℞ Ac. arsenosi . . . . . 0.001 (gr. $\frac{1}{60}$)
Iodoformi . . . . . 0.06 (gr. i)
Ferri et potass. tart . . . . . 0.06 (gr. i)
Ext. bellad . . . . . 0.03 (gr. iss)
Ext. quinquinæ . . . . . 0.06 (gr. i)
Quin. sulphat . . . . . 0.02 (gr. $\frac{1}{3}$)
Ext. nucis. vom . . . . . 0.01 (gr. $\frac{1}{6}$)
Ext. valerianæ . . . . . 0.06 (gr. i)

For one pill.

A REAL RHEUMATISM CURE.

LAYNE (*Cincinnati Lancet Clinic*) has been experimenting with salol, colchicum, the iodides and salicylates and has given them all up in favor of the prescription which he considers a specific:

℞ Ext. xanthoxylini . . . . . ℥i.–ii. 30.00–60.00
Ext. asclepiadis cornuti.
Ext. solani dulcamara . . . . . āā ℥ss. 15.00
Ext. taraxaci densleonis . . . . . ℥ii. 60.00
Spr. frumenti, q. s. ad. . . . . ℥viii. 240.00

Mix. Dose—Four teaspoonfuls after each meal.

INFANTILE BRONCHITIS.

THE *St. Louis Courier of Medicine* gives the following for infantile bronchitis:

℞ Tinct. nucis vomica. . . . . gtt. xvj
Tinct. digitalis . . . . . gtt. xvj
Liq. peptonoides cum creos . . . . . ℥iv
Aque gaultheria. . . . . q. s. ad ℥ij

M. Sig.—℥j every four hours (for six months' child).

For cyanosis and cardiac inadequacy of infantile bronchitis: Mustard paste, 1 part mustard to 5 parts flour, warm water q.s. to make a paste; over entire chest until well irritated.

Also, internally.

℞ Spir. glonoini . . . . . gtt. iij
Spir. frumenti . . . . . ℥ij
Aqua menth. pip. . . . . ℥ij
Aqua . . . . . q. s. ad ℥j

M. Sig.—One-half teaspoonful p. r. n.

For infantile bronchitis, with symptoms of suffocation: Place child under tent and "steam" with beechwood creosote 5 to 20 drops to a quart of water. Keep under for twenty minutes every hour or two until marked improvement.

PHARYNGITIS AND ACUTE BRONCHITIS.

IN laryngitis and acute bronchitis, Liègeois prescribes the following:

℞ Sodii benzoat . . . . . gm. 4.0 (℥i)
Tinct. aconit . . . . . c. c. 1.20 (mxx)
Aq. laurocerasi . . . . . 4.0 (℥i)
Syr. tolutani.
Syr. codeinæ.
Aquæ . . . . . aa. 60.0 (℥ij)

M. Sig. To be taken in the twenty-four hours. For pharyngitis he gives large doses of sodium benzoate.

Dysmenorrhea—A Clinical Note.

By J. E. DEARDEN, M. D., New York City.

Bessie K., 19 years of age, consulted me in March, 1900, for dysmenorrhea from which she suffered severely. She began menstruating at 15 years of age. For the past year she has been growing worse so that at the time of consultation she was compelled to spend several days in bed at each period. An examination disclosed no organic trouble. She was put on Hayden's viburnum compound, one teaspoonful in hot water four times daily for five days before the expected menstrual flow, and a teaspoonful every two hours when the flow began.

The second period after treatment she passed in comparative comfort, and after seven months further treatment was abandoned as unnecessary. She has had up to the present time no return of the dysmenorrhea.

I have used this remedy in my practice for a number of years and have been very well satisfied with the results obtained.

1368 Lexington Avenue.

CORRESPONDENCE.

William Beaumont—Memorial Address.

Editor Buffalo Medical Journal:

Sir.—The undersigned committee takes pleasure in announcing, that Prof. William Osler, of Johns Hopkins University, Baltimore, will deliver a memorial address on "William Beaumont, the First and Greatest American Physiologist," under the auspices of the St. Louis Medical Society of Missouri. The lecture takes place at the Odeon, on Saturday, October 4, 1902, at 8 o'clock p.m. The medical profession of your city and environment, is cordially invited to attend and to honor our distinguished guest.

The subject to be presented and the eminence of the essayist, make this occasion one of the greatest importance and interest. We ask your hearty coöperation, and beg of you to give this announcement the publicity that it merits.

For the committee,

ROBERT LUEDEKING, Chairman.

St. Louis, August 25, 1902.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

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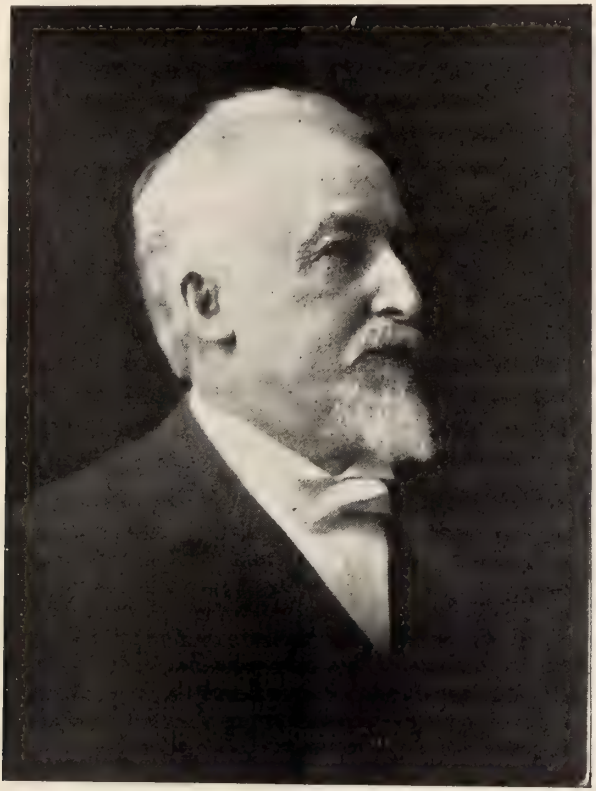
Thomas Lothrop, M. D.

AT RARE intervals the JOURNAL, in fulfilment of its solemn obligations, is called upon to chronicle the death of a former or present member of its editorial corps. In this instance there is special sadness attached to this duty, because Dr. Lothrop was no ordinary man, no commonplace citizen, no undistinguished physician. He was indeed the very opposite of all these. He was not an ordinary man for his physical organisation and mental powers were unusually developed; he was no commonplace citizen, because he took an active part in civic, educational and social development; he was not undistinguished as a physician, because he attained unusual eminence in his profession and had the respect of his colleagues far beyond the average. In all of these capacities he enjoyed the trials and triumphs incident to a busy and well-ordered life.

Thomas Lothrop was born in Provincetown, Mass., April 16, 1836, and died at Buffalo, August 7, 1902, and was therefore 66 years, 4 months and 22 days old at his decease. His early education was received at private schools and at Clinton Liberal Institute, and he graduated in medicine at the University of Michigan in 1858. He soon established himself in practice in Buffalo, locating first at Black Rock, and in 1871, removed to the more central part of the city. From this time his professional career was a most active one, being only partially interrupted by a single term as Superintendent of Public Schools, as the office was then termed, until his death.

In 1883 he founded, in association with Dr. John Cronyn, the Medical Department of Niagara University, and was its acknowledged head for several years before it was united with the University of Buffalo. In the former he was professor, and in the latter honorary professor, of obstetrics. As a teacher he achieved conspicuous honor, and was a master in his special



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THOMAS LOTHROP, M. D.—1836-1902.

department. He established the Woman's Hospital, which was first a maternity and afterward a gynecological institution. In this his pupils learned clinical obstetrics and became well equipped on graduation. He has had the usual hospital service as attending and consulting physician in several institutions in this city,—the Sisters of Charity, St. Francis's, St. Mary's Maternity, Providence Retreat, etc., and was appointed in 1892, one

of the managers of the Buffalo State Hospital. He was an active member of the board of management of the Church Charity Foundation and succeeded to the presidency thereof upon the death of Dr. James P. White in 1881. He was also president of the board of trustees of the State Normal School at the time of his death. From all this, which is necessarily but a brief sketch, it will be observed that he was truly a man of affairs, in its broad sense.

He was a member of the several local medical societies, had been president of the Medical Society of the County of Erie and of the Buffalo Academy of Medicine, and was a Fellow of the American Association of Obstetricians and Gynecologists from its foundation until 1899, when he resigned on account of failing health. He had small sympathy with written codes of ethics, though in every walk of his long and useful life he was the very apostle of that higher ethics which is exemplified in the daily conduct of a courtly gentleman.

From 1879 to 1899—twenty years—he was the senior editor of this JOURNAL, though for ten years or more he bestowed but little active work upon its columns. He severed his relations with the JOURNAL August 1, 1899, at which time the succeeding editor-in-chief wrote:

Very few men have sustained editorial relations to a medical journal for so long a period as twenty years and this circumstance, alone, speaks strongly of the character and individuality of the distinguished retiring editor. During a considerable part of the time he maintained relationship to the JOURNAL Dr. Lothrop was an active, if not a leading spirit in the conduct of its affairs. His ready and forceful pen was often wielded in its columns and his tactful business acumen guided its career on the road to success. He has occupied a position of prominence in the medical profession during all this time and today stands second to none in all that constitutes a strong physician, a useful citizen and an upright man.

Dr. Lothrop never married, but among his surviving relatives is an adopted son, Dr. Earl P. Lothrop, who has already taken a prominent position in the profession and succeeds to a large part of the estate of his foster-father. The others who survive are three sisters and a brother: Mrs. Adeline Nickerson, of Somerville, Mass.; Mrs. Rebecca Fielding and Mrs. Rotie Cook, both of Provincetown, Mass.; and Dr. Benjamin Lothrop of this city.

Such a career of usefulness and honor is vouchsafed to only a

few men, and Dr. Lothrop left the precious heritage of a spotless life to the municipality in which he lived and moved so long, to the profession which he adorned so much, and to his surviving kin whom he loved so well. As a final thought we beg to offer our sympathy to those who survive, in which we feel sure the entire profession of medicine in this vicinity will join.

William Warren Potter

Is Medical Unity Practical?

MEDICAL unity does not mean unity in medical practice. It is therefore pertinent to inquire, What is medical unity? What is unity in medical practice?

In every department of thought, accuracy is essential to progress and accuracy is the more difficult as similarities increase.

We believe that the medical history of this country would have been written in quite different terms if medical men had never confused medical unity with unity in medical practice. So believing, we ask our readers to take a moment to consider these two thoughts that seem so much alike, but are in fact so unlike.

First, it is to be noted that, as we use the term, medical unity is of the state, is political, and is most closely related to state medicine, to the relations of physicians as a class to the people organised for mutual purpose in that most marvelous conception, the modern state, the commonwealth. That it has to do with the enactment and enforcement of sanitary codes and ordinances, the making and keeping of vital statistics, the reporting of communicable diseases, deaths and causes of death, the giving of expert testimony as to the nature and extent of disease when the same is alleged as the basis of claim for damages, testimony as to testamentary capacity, and testimony as to mental health in cases where insanity is set up as an excuse for crime or to escape the usual penalties for crime, the making of post-mortem examinations in medico-legal cases, serving as medical examiner or coroner, the making of examinations for life insurance, the examinations of applicants for U. S. pension, and the examination for appointment to the medical service of

the U.S. army, navy or marine hospital service, and the examination for state license to practise medicine.

For years there has been medical unity in this country in all these various directions, and it is worthy of note that our particular part of the medical profession has not been consulted about the matter, neither has it been brought about in all cases by or with our consent, but has frequently been enacted in spite of our most earnest, emphatic, if unwise, protest. Again, it is to be noted that this and much more that time and space will not permit us to cite, is but the logical consequences of the laws of 1857, 1865, and 1890. That by the operations of these laws and for the above mentioned purposes, the people then ordained that in this state there should be medical unity. We have made sectarians, the laws have made for unity.

Much of the resentment felt by members of our profession against the laws and possibly against the law-making powers, has come from the fact that we have confounded, as many still do, the prerogatives of the law-making authority with the prerogatives of our profession. We have thought, and some still think, that it is our privilege to say who shall practise the art of healing, and what one who so practises shall believe and think. Whereas, the people reserve to themselves the right to declare who shall practise that art and also determine what degree of liberty of opinion, of independence of judgment the members of the craft shall enjoy and exercise.

Again, many have confounded, and some still so confound, the people's efforts at political medical unity with medical uniformity of practice, that the commonwealth was undertaking to dictate to a physician how he should feel, think, and reason, and therefore prescribe or treat in a given case;—the thought of all thoughts the most abhorrent, the most to be opposed, the most subversive of progress, the most unscientific, the most inartistic, the most un-American, the most archaic.

So thinking, good men, simply from mental confusion, from lack of distinguishing between political medical unity and uniformity in medical practice, have drifted into a position more or less out of sympathy with our medical laws, have come to think lightly, harshly, meanly, of the wisdom or expediency of those laws, have ceased from trying to understand or coöperate with such laws, have grown cool, or antagonistic to our county and state medical societies, and have affiliated with other medi-

cal bodies having other and less intimate relations to the law-making powers.

This is at one and the same time true, unnecessary and unfortunate. The commonwealth never has, and, while divinely guided, never will endorse this, that or the other theory of therapeutics; never has and never will adopt allopathy, homeopathy or eclecticism, radiography, organotherapy, osteopathy, or Eddyism; but, on the contrary, always has and under an All-wise Providence ever will maintain the right of educated physicians to experiment in therapeutics so long as in medicine there shall be a vestige of the art of healing.

Meanwhile, there seems to be no reason why medical men need to continue to confound things quite easily recognised by their dissimilarities, their individualities; but there is every reason why we should set political medical unity in its place and, remembering its source, with due homage and with sympathetic loyal support, at the same time that we assert and claim as our inalienable and inviolable and imperishable right, that to be free, to be progressive, to be efficient, medical men are and ever must remain the judges of the truths of medicine.

Carcinoma in Women.

PROFESSOR WILLIAM JAPP SINCLAIR, of Manchester, chairman of the section on obstetrics and gynecology, at the recent meeting of the British Medical Association, chose for the subject of his address "Carcinoma in Women, chiefly in its clinical aspects." This important subject, as was to be expected, was most ably dealt with, and the large audience assembled to hear the distinguished speaker testified again and again its approval when he made telling points, as frequently happened.

In regard to the pathology of cancer Prof. Sinclair thought little or nothing had been accomplished in solving the question of cause—and the cause of the disease is, after all, the most important problem, next to prevention, that remains to be solved; and, indeed, both go hand in hand, for the cause once discovered, prevention will be simplified. If pathology has been without result, not so with surgery in the opinion of the speaker. Although he quoted some very gloomy views expressed at recent gynecological meetings in this country and Germany,

and he very aptly said that a wave of mental depression had been passing over the gynecological world. For himself, however, he did not share their pessimistic views, and proceeded to point out that the results of the best known operators continue to improve, thus offering great encouragement for persistent future efforts. They were obtaining, he said, better immediate results, and the percentage of immunity for five years after operation—the accepted test—was growing.

Not only this, but the percentage of operable cases when first seen had also increased, since patients came earlier under observation, while improvements in technic had extended the indications for treatment. Statistics of carefully reported work done under circumstances in which sources of error were reduced to the minimum were pointed to in proof of these assertions.

Professor Sinclair said that one of the evil results of the depression arising from the unfavorable consequences of vaginal hysterectomy had been to resort, in many instances, to the extreme of dissecting out the whole of the lymphatics and cellular tissue of the pelvis along with the internal sexual organs, the impression being that the chances for better remote results thereby would be increased. He characterised this radical method of operating as little better than homicidal vivisection, which to his mind were unjustifiable. He did not believe that cancer of the uterus was on the increase, but, on the other hand, the disease in realty was diminishing. He counseled no relaxation in the efforts to discover the cause of cancer or to improve the technic of its surgical management.

Dr. Sinclair asserted that cancer was infectious to the individual already suffering from the disease but not to others; hence the remedy lay in early surgical intervention. In this address it had been his endeavor to direct attention to the importance of exact scientific clinical methods of observation. In pursuance of this object he deemed it necessary to direct specific attention to the futility of much that has been done in the past to establish the etiology and true pathology of cancer. He welcomed all honest enlightened effort and deprecated none. It was his hope that in this research every general practitioner of medicine would coöperate with those engaged in special lines of work. The labors of both sets of workers should be complementary. The family physician generally knew most about the history and environment of the patient and could obtain relative imformation that often was denied to the specialist.

Concluding, he said it was his earnest hope and desire that some of the younger men with more energy, better opportunities, starting on a higher level of knowledge, would professedly take up this great enterprise and see whether by calm, industrious and enlightened clinical observation, alone or collectively, they could not discover the cause and the remedy for this mysterious and dreadful malady.

Running all through this notable address is that dignity of expression and earnestness of purpose so characteristic of the English nature, and it needs must be read to be appreciated. We have made this somewhat extended résumé of the paper, because the subject it discusses is of transcendent importance, and because further, of the strong, though somewhat unique, fashion the distinguished chairman employs in presenting it; and, because, still further, it so nearly expresses views that we have been approaching for some time past.

Is It Words or Things?

OUR highly esteemed contemporary the *Cleveland Medical Journal*, always positive, generally accurate, and often right, in its issue for August, reports the interesting fact that we have taken away its breath with our recent statement that "There are no sects in medicine known to the law" and courteously suggests that we further elucidate the subject. This we hasten to undertake, but first pause for an instant to record the hope that the suspension of respiration upon the part of our esteemed friend was quite transitory, and that no sub-oxidation, cerebral or otherwise, resulted therefrom, remembering that shortage in air supply is frequently inconvenient, and generally disagreeable; and further that normal cerebration is essential to the right understanding of this important topic even after full elucidation.

Our title suggests and to many will make the complete elucidation. In brief the answer is, that to those content to be satisfied with the search for words rather than the facts which words simplify, our statement as to the law and the sects is quite inaccurate, misleading, or false as one will; to those who are accustomed to see through words to things, our language although possibly condensed is yet substantially accurate.

By the "law" we do not mean the words of the statute or the decree of the court interpreting that statute, but we do mean

the condition of the medical profession resulting from the law, its relation to the people, to vital statistics to life insurance, to the trial of medico-legal cases, to expert testimony before the courts, to medical services, to examinations of candidates for license to practise medicine, to voting upon the fitness of candidates for such license, and in fact upon every act a doctor may do or not do, of which the law of the land may take cognisance; and in each and all of these instances the law,—that is to say, the condition produced by the law, the condition intended by the statute and the decree of the court interpreting that statute to be the result of the law in such cases made and provided,—knows no sects in medicine.

When our highly esteemed contemporary argues to the contrary of this statement he undertakes to prove that those who think, and are rather proud to think that they belong to the medical profession, are sadly mistaken; that in fact they are only members of the older and more numerous of the medical sects.

PERSONAL.

Dr. Jane W. Carroll, of Buffalo, was recently appointed supreme medical examiner of the Ladies' Catholic Benevolent Association. At a reception lately given to Dr. Carroll by the local branch of the association, the president, Mrs. Mary Lee, congratulated Dr. Carroll on the honor which had been conferred upon her. This association of women comprises 80,000 members, and in the name of the Buffalo branch Mrs. Lee presented her a beautiful floral gift. Dr. Carroll made fitting response.

Dr. F. W. Jelks, who has been engaged in practice in St. Louis for some years, has removed to Hot Springs, Arkansas, and will take charge of the practice of his father, the late Dr. James T. Jelks. He will also assume charge of the *Hot Springs Medical Journal*, and will become one of the associate physicians of the Ozark Sanatorium.

Dr Matthew D. Mann, of Buffalo, sailed for Europe, August 6, 1902, for a short vacation. During his absence he will attend the International Congress of Obstetrics and Gynecology, at

Rome. Dr. Mann has been chosen an honorary president for America at this congress. He is accompanied by Mrs. Mann.

Dr. Harvey R. Gaylord, of Buffalo, departed for Europe about the middle of August, to remain for an extended period in pursuit of his studies at the German universities. He was accompanied by Mrs. Gaylord.

Dr. John H. Grant, of Buffalo, has removed his residence from Hamburg to the Algonquin, 76 Johnson Park, and his office from 893 Ellicott Square to 715 Mutual Life Building.

OBITUARY NOTE.

Dr. P. O. Hooper, of Little Rock, Arkansas, died July 29, 1902, on a railway train en route to California, aged 68 years. His disease was alleged to be asthma. Dr. Hooper was vice-president of the American Medical Association and as such presided at the St. Paul meeting in 1882. He was an alienist of distinction and for many years was superintendent of the Arkansas state insane asylum.

SOCIETY MEETINGS.

The Erie County Medical Association will hold its next regular quarterly meeting at the University Club, 295 Delaware Avenue, Buffalo, September 8, 1902. Drs. William H. Mansperger and James E. King will read papers, after which there will be social entertainment including a collation.

The Southern Surgical and Gynecological Association will hold its fifteenth annual meeting at Cincinnati, November 11 to 13, 1902, under the presidency of Dr. William E. B. Davis, of Birmingham. The secretary, Dr. William D. Haggard, Jr., of Nashville, in effect announces in his circular of invitation for papers, that in coming north of its original boundary lines the association will become national in its theory and practice—geographically and professionally. Hence it is to be anticipated the meeting announced will be the largest and most

representative that has yet been held by the association. Those who desire to present papers should address Dr. Haggard at an early day.

The American Electro-therapeutic Association, will hold its twelfth annual meeting, September 2, 3 and 4, 1902, at Hotel Kaaterskill, Catskill Mountains, New York. The secretary is Dr. George E. Bill, of Harrisburg, Pa.

The American Röntgen Ray Society will hold its next annual meeting at Chicago, December 10 and 11, 1902, under the presidency of Dr. G. P. Girdwood, of Montreal. Dr. James B. Bullitt, of Kentucky, is the secretary, and Dr. John B. Murphy, of Chicago, is one of the members of the local committee of arrangements which is under the chairmanship of Dr. Ralph R. Campbell.

The New York State Homeopathic Medical Society will hold its semi-annual meeting at Utica, N. Y., September 16 and 17, 1902. Dr. DeWitt G. Wilcox, of Buffalo, is the secretary.

The American Dermatological Association will hold its twenty-sixth annual meeting at the Hotel Bellevue, Boston, September 18, 19 and 20, 1902, under the presidency of Dr. George Thomas Jackson, of New York. During the proceedings Dr. G. W. Wende, of Buffalo, will read a paper entitled, An unusual case of epidermolysis bullosa hereditaria.

The Mississippi Valley Medical Association will hold its 28th annual meeting at Kansas City, Mo., October 15-17, 1902, under the presidency of Dr. S. P. Collings, of Hot Springs, Ark. The preliminary program is out with a group of 55 papers already listed. The officers anticipate an unusually interesting meeting. An address in medicine will be delivered by Dr. Hugh T. Patrick, of Chicago, and an address in surgery, by Dr. Geo. W. Crile, of Cleveland. Further particulars can be had by addressing the secretary, Dr. Henry Enos Tuley, 111 Kentucky Street, Louisville.

The Medical Society of the Missouri Valley will hold its annual meeting, September 18, 1902, at Sioux City, Iowa. Among the papers to be read are the following: Vernal catarrh, especially in adults, H. Gifford, Omaha; Chronic spinal muscu-

lar atrophy, F. E. Coulter, Omaha; Surgical treatment of lesions of the stomach, J. E. Summers, Jr., Omaha. Dr. Richard C. Moore is president and Dr. Charles Wood Fassett is the secretary.

BOOK REVIEWS.

AN EXPERIMENTAL AND CLINICAL RESEARCH INTO CERTAIN PROBLEMS RELATING TO SURGICAL OPERATIONS. By GEO. W. CRILE, A. M., M. D., Ph.D., Professor of Clinical Surgery, Medical Department Western Reserve University; Assistant Surgeon to Lakeside Hospital, Cleveland. Philadelphia: J. B. Lippincott & Co. 1901.

Dr. Crile has become so well known to the surgical and scientific world as a pioneer in physiological research, that the present monograph would naturally be expected to contain most interesting and suggestive material, and the fact that the work has received the Alvarenga prize for 1901 of the College of Physicians and Surgeons, amply attests this fact. Dr. Crile's original point of view and the methods by which he produces his work give exceptional value to all of his observations. Chapter III. on the effect of severing and mechanically irritating the vagi throws a most interesting light upon this much discussed question. It is of especial interest to surgeons to find that Dr. Crile, by actual experimentation, as well as by operations on living patients has determined that the results of this much feared accident in surgical operations is not nearly so serious as previously supposed, especially when the phenomena associated with the severance of these nerves are properly interpreted. Chapter IV. sheds an extremely interesting light upon the present views of intravenous infusion of saline solution. Chapter V. details a series of experiments with cocain solutions of varying strength. It is especially interesting to note that Dr. Crile's observations were largely made before the present general interest in this subject, and to observe that he has expressed himself with the greatest caution as to the ultimate use of spinal cocainisation. The present tendency toward a conservative estimate of the value of this procedure has been fairly foreshadowed by Dr. Crile's able exposition of the subject. Chapter VI. deals with the control of hemorrhage in operations about the head by temporary closure of the carotid arteries. Aside from the great value of this work as a stimulus to investigators, the facts gained by the experimental data are of the first importance and are modestly expressed by the author in the concluding remarks at the end of the book.

The proper interpretation of a slowed or of an accelerated pulse, or of an inhibited respiration, the prevention of either direct or reflex inhibition of the heart from mechanical stimulation of the vagus or its branches by the use of

atropin and cocain, the safe and absolute control of hemorrhage by temporarily closing the carotid arteries render operative procedures of the head and neck so much safer as to greatly increase surgical possibilities."

H. R. G.

PRACTICAL DIETETICS. With Special Reference to Diet in Disease. By W. GILMAN THOMPSON, M. D., Professor of Medicine in Cornell University Medical College, New York City; Visiting Physician to the Presbyterian and Bellevue Hospitals. Octavo, pp. 851. Second edition, enlarged and thoroughly revised. New York: D. Appleton & Company. 1902. [Price, $5.00.]

Food studies comprise an important topic in the scientific series of experimental investigations of the period, and a knowledge of food values in dietetics is growing to be a necessity. This is as true whether in the positive sense of what should be eaten in health and disease, or in the negative meaning of what should be avoided in either condition.

To state the case in another way the economic values of dietaries as applied to the several wasting diseases, is of even more importance from a clinical viewpoint than the therapeutic values of the several drugs that may have more or less clinical importance.

When the first edition of this work appeared it was hailed as the first systematic treatise on the subject that had reached the textbook dignity, and it was adopted as such by the colleges to a considerable extent. This treatise has taken the lead, therefore, in creating an interest in dietetics, far beyond the former condition of the science, and a scientific application is being made of the principles taught by Thompson, in almost every department of medicine.

Before the publication of this textbook the literature of the subject was scattered throughout treatises upon internal medicine and in monographs, and the science of feeding patients properly was in very crude shape. Now, thanks to this author, we have reached a more systematic basis and can prescribe food with nearly as much precision as we can medicine.

Professor Thompson is a teacher of experience and a master of his work. In this edition he has presented much new material and has revised and rewritten—one or both—much of the old, so that it represents the condition of the science today. It is a work that should be in the hands of every physician no matter what his specialty or "system" of practice,

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TRANSACTIONS OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS. Vol. XIV. For the Year 1901. Edited by WILLIAM WARREN POTTER, M D. Philadelphia: William J. Dornan, Printer. 1902. Copyrighted.

The annual volumes of the association are replete with interest and evince a high scientific *esprit de corps* on the part of its members. This handsomely printed and bound standard octavo book of over 400 pages contains the proceedings of the

association, including the papers read and discussions thereon, at its fourteenth annual meeting at Cleveland, September 17, 18 and 19, 1901. Meeting, as it did, under the shadow of the great national affliction that had then just befallen this country, the funeral of President McKinley being held while the association was in session, it is almost remarkable that the proceedings were completed. Nevertheless, even in the face of such dire calamity, this volume is one of the best issued by the organisation. From contents page to index, from president's address to memorials, it is full of instructive interest.

Such a meeting by such a body of trained medical men furnishes in reality a post-graduate course of instruction to the audience, and we are pleased to note that the list of visitors in attendance at this meeting was a long one. It should be so. The medical profession in the vicinity of these meetings should attend in full force, for in no other way in the same length of time can as much valuable information be obtained by the general practitioner or by him who would become a specialist, or by one who now maybe is a semi-specialist.

The association made its annual dinner a memorial occasion at which fitting tributes were paid to the life and character of the dead president, one of which was a most feeling address by one of President McKinley's very intimate friends. While this may seem somewhat bizarre when related, yet as witnessed it really was a most appropriate ceremonial entirely befitting the solemn ceremonies—occasioned by the great tragedy—beginning in Buffalo and ending at Canton during the week of this meeting.

The next meeting to be held at Washington during this month, as noticed in the JOURNAL for August, promises to be one of unusual interest.

A LABORATORY COURSE IN BACTERIOLOGY. For the Use of Medical, Agricultural and Industrial Students. By FREDERIC P. GORHAM, A M., Associate Professor of Biology, Brown University; Bacteriologist, Health Department, Providence, R. I. 182 pages, with 97 illustrations. Philadelphia and London: W. B. Saunders & Company. 1901. [Price, $1.25 net.]

This book intended only as a laboratory guide in bacteriology for medical, agricultural, and industrial students, is all that could be expected of it, considering the small number of pages it contains. While it is not designed exclusively for the student of any particular branch, it is a very practical preparatory guide from which he may comprehensively continue the study upon the special lines he selects.

The author has the subject-matter well in hand, as is shown by the admirable arrangement of his topics; his clear and concise directions, as to procedures in technique; the staining methods, formulæ, and the like, are reliable and effective.

A few unimportant omissions and errors are found, for instance: Fig. 88, representing tubercle bacilli in sputum should

have been credited to the source from which it is copied, as has been properly done with various other illustrations. (It was first known to us in the Compend on Bacteriology, by M. V. Ball.) There is an error in the references to figs. 16 and 87. Fig. 89, copied from Frankel and Pfeiffer represents a pure culture of tubercle bacilli, not tubercle bacilli in sputum, also some of the reproductions of bacteria, as figs. 65 and 77, are poorly done. Stress should have been laid on the diagrammatic character of the illustration of the Widal reaction (fig. 85).

C. A. B.

QUAIN'S DICTIONARY OF MEDICINE. By various writers. Edited by H. MONTAGUE MURRAY, M. D., F. R. C. P., Joint Lecturer on Medicine, Charing Cross Medical School and Physician to Out-patients, Charing Cross Hospital; Senior Physician to the Victoria Hospital for Children, Chelsea, and to the Foundling Hospital. Assisted by John Harold, M. B., B. Ch., B. A. O., Physician to St. John's and St Elizabeth's Hospitals, and Demonstrator of Medicine at Charing Cross Medical School; and W. Cecil Bosanquet, M. A., M. D., M. R. C. P., Physician to Out-patients, Victoria Hospital for Children, Chelsea, and Pathologist to Charing Cross Hospital; Late Fellow of New College, Oxford. Third edition, largely rewritten and revised throughout. With 14 colored plates and numerous other illustrations. New York: D. Appleton & Co. 1902. [Price, half-morocco. $10.00.]

During the past twenty years many reference books have been created but it is quite safe to say that none have excelled Quain's in practical value. Some, to be sure, have been more comprehensive extending through a series of tomes, while others have been issued in periodical form. But no single volume work equals this in comprehensiveness, scientific accuracy, minuteness of detail or clearness of expression.

From the first it became a favorite with the profession and its general scheme as originally laid out by Sir Richard Quain has been steadily maintained. One of its strong points is the development of diagnosis and treatment which will be found running through every article to which those topics are germane.

In this edition many articles have been rewritten, some have been omitted, while others have been revised, the effect of which is to present a thoroughly modern volume which may serve to adorn any physician's library. The list of contributors is a long and able one embracing the names of some of the most eminent writers known in the literature of medicine. The editor of the present edition has certainly distinguished himself.

THE ARTIFICIAL FEEDING OF INFANTS. By CHARLES F. JUDSON, M. D., Physician to the Medical Dispensary of the Children's Hospital, and J. CLAXTON GITTINGS, M. D., Assistant Physician to the Medical Dispensary of the Children's Hospital. Duodecimo, pp. 368. Philadelphia: J. B. Lippincott Company. 1902. [Price, $2.00.]

Judson and Gittings present in this volume an authoritative statement of the views of leading pediatrists in Europe and

America upon the subject of artificial feeding at the present day. They state in the preface that the substance of the work has been gleaned from the periodical literature, monographs and textbooks published since 1894, and the extensive bibliography at the end of the book shows the range and value of their gleaning.

The subject of breastfeeding is not considered at all nor any of the related problems, as the improvement of the mother's milk.

The book contains several practical chapters on the subject of infant feeding. It serves also to acquaint the reader with the views of the prominent pediatrists of the day on all matters relating to artificial feeding, and presents to him in concise form information which would otherwise take much time and labor to acquire. M. J. F.

MINOR SURGERY AND BANDAGING. By HENRY R. WHARTON, M. D., Professor of Clinical Surgery in the Woman's Medical College; Surgeon to the Presbyterian Hospital, Philadelphia, etc. In one 12mo volume of 612 pages, with 509 illustrations, many of which are photographic. Fifth edition, enlarged and thoroughly revised. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, $3.00 net.]

This work is designed primarily for the student and it seems to the reviewer to be well adapted to his needs. It contains a complete and well-illustrated chapter on bandaging, a full consideration of all procedures included under the head of minor surgery, chapters on fractures, dislocations, and a section on operations on the cadaver in which the principal operations in the domain of general surgery are both described and illustrated. The author is clear and concise in his descriptions, the illustrations, many of which are photographic, are to the point and, taken by and large, the book is thoroughly modern and altogether excellent. M. J. F.

THE SURGERY OF THE RECTUM. By CHARLES B. KELSEY. A. M., M D., Late Professor of Pelvic and Abdominal Surgery at the New York Post-Graduate Hospital, and Professor of Rectal Surgery at the University of Vermont. Octavo, pp. 411. Sixth edition. Illustrated by 215 engravings. New York: William Wood & Co. 1902. [Price, 3.00]

This work is no stranger to the profession, it having stood the test of five previous editions in the period of about twenty years. The first edition was one of a series of monographs published by William Wood & Company and appeared in 1882.

This edition is largely a rewritten issue as the changes necessary to bring it forward to the present time were too numerous to prevent the author to remain content with a mere revision.

The old general style and characteristics are largely maintained, but it becomes now a modern treatise in all essentials.

The illustrations are numerous. There is considerable gynecology dealt with in it for a work with its title, but that does not detract from its value—it even enhances it for many persons.

Seventeenth Annual Report of the State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania. Vols. I. and II. Transmitted to the Governor, November 30, 1900. Benjamin Lee, M. D., Secretary. Wm. Stanley Ray, State Printer of Pennsylvania. 1901.

The well organised and equally well administered Pennsylvania State Board of Health issues each year an elaborate and scientific report of its work. It embraces reports from the boroughs and cities throughout the state, so that in the two volumes can be found the true sanitary status of every county and populous region within the commonwealth.

Almost every public health question is discussed in these annual reports, and school sanitation, a topic of vast moment, is given special prominence. The secretary of the Pennsylvania board is a sanitarian of superior attainment as well as a secretary and executive officer of vast experience, hence the great value of his annual volume.

Johnson's First Aid Manual. Suggestions for Prompt Aid to the Injured in Accidents and Emergencies. Edited by Fred B. Kilmer. Illustrated Pp 113. New Brunswick, N. J.: Johnson & Johnson. 1901. [Cloth, 50 cents.]

This little brochure is full of practical thought that will serve as a reminder to the medical men who are liable to meet with occasional accidents and to render the surgical care resultant therefrom. It is designed to accompany Johnson's accident case, and deals principally with the surgical appliances made by the celebrated house of Johnson & Johnson. The manual is full of excellent illustrations, largely drawn from life or real conditions, which show with distinctness many of the dressings in situ.

BOOKS RECEIVED.

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M D., Boston; E. Landolt, M. D., Paris; Thomas G. Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London, with Regular Correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume II. Twelfth series. Philadelphia and London: J. B. Lippincott Company. 1902. [Cloth, $2.00 each.]

A Text-Book of Practical Therapeutics. With especial Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. With special

chapters by Drs. G. E. deSchweinitz, Edward Martin and Barton C. Hirst. New (9th) edition. In one octavo volume of 851 pages, with 105 engravings and 4 colored plates. Philadelphia and New York: Lea Brothers & Company. [Cloth, $4.00; leather, $5.00; half morocco, $5.50 *net*]

Woolsey's Surgical Anatomy. Applied Surgical Anatomy Regionally Presented, for the use of Students and Practitioners of Medicine. By Geo. Woolsey, A. B., M. D., Professor of Anatomy and Clinical Surgery in the Cornell University Medical College; Surgeon to Bellevue Hospital, etc. Octavo, 511 pages with 125 illustrations, including 59 full-page inset plates in black and colors. Philadelphia and New York: Lea Brothers & Company. 1902. [Cloth, $5.00 *net*; leather, $6.00 *net*.]

Grayson's Laryngology. A Treatise on the Diseases of the Throat, Nose and the Associated Affections of the Ear. By Charles P. Grayson, M. D., Lecturer and Instructor in Laryngology in the Medical Department, University of Pennsylvania. In one octavo volume of 540 pages with 129 engravings and 8 colored plates. Philadelphia and New York: Lea Brothers & Company. 1902 [Cloth, $3.00 *net*.]

The Theory and Practice of Infant Feeding. With Notes on Development. By Henry Dwight Chapin, A. M., M. D., Professor of Diseases of Children at the New York Post-Graduate Medical School and Hospital, etc. Octavo, pp. 335. Illustrated. New York: William Wood & Company. 1902. [Price, $2.25 *net*.]

The Medical Student's Manual of Chemistry. By R. A. Witthaus, A. M., M. D., Professor of Chemistry, Physics and Toxicology in Cornell University Medical College, New York City. Fifth edition. Octavo, pp. 689. New York: William Wood & Company. 1902. [Price, $3.50 *net*.]

A Physician's Practical Gynecology. By W. O. Henry, M. D., Professor of Gynecology in the Creighton Medical College, Omaha, Neb. First edition; 226 pages, 5 full-page illustrations and 61 illustrations in the text. Lincoln, Neb.: The Review Press. 1902. [Price, cloth, $2.00.]

The Principles and Practice of Bandaging. By Gwilym G. Davis, M. D., Assistant Professor of Applied Anatomy, University of Pennsylvania 12mo, pp. 157. Illustrated from Original Drawings by the Author. Philadelphia: P. Blakiston's Son & Company. 1902. [Price, $1.50 *net*.]

The Practical Medicine Series of Year Books. Comprising ten volumes on the year's Progress in Medicine and Surgery. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VIII. Pediatrics and Orthopedic Surgery. Edited by W. S. Christopher, M. D., John Ridlon, A. M., M. D., Samuel J. Walker, A. B., M. D., 1902. Chicago: The Year Book Publishers. [Price, $1.25; entire series, $7.50.]

Massage and the Original Swedish Movements. Their Application to Various Diseases of the Body. Lectures before the Training Schools for Nurses connected with the Hospital of the University of Pennsylvania, German Hospital and others of Philadelphia. By Kurre W. Ostrom, from the Royal University of Upsala, Sweden. Fifth edition, revised and enlarged; 115 illustrations. Philadelphia: P. Blakiston's Son & Company. 1902. [Price, $1.00 *net*.]

Gibson & Russell's Physical Diagnosis. Third edition, revised and rewritten by Francis D. Boyd, C. M. G., M. D., F. R. C. P. E., Assistant Physician, Edinburgh Royal Infirmary. 12mo., pp. 465. With 144 illustrations. New York: D. Appleton & Company. Edinburgh and London: Young J. Pentland. 1902.

LITERARY NOTES.

THE *Medical Standard*, published by G. P. Engelhard & Co., Chicago, will present itself for September as an educational

and association number. The subjects will be treated in three main divisions, namely—medical colleges, medical literature and medical societies. The contributors to this number will include some of the most distinguished writers in American medicine, and numerous illustrations will attractively supplement the text. Orders should be placed in advance.

The J. B. Lippincott Company, of Philadelphia, having recently completed their building, situated at Sixth and Locust Streets, have equipped it with new and improved machinery, and have exceptional facilities for the typesetting, illustrating, printing, binding, and mailing of weekly and monthly periodicals of every description.

They make a specialty of reports of medical colleges, training schools, hospitals, and asylums, and of the publication of genealogical, historical, medical, and surgical works.

They also make a specialty of the printing of fine editions of poems, translations, essays, and memoirs for private distribution, and of bindings of all varieties from the plainest cloth to the finest levant morocco.

With a thoroughly competent proof-reading department, together with well-qualified operatives in every branch of the business, they can be of great assistance to publishers of technical, trade, or professional works.

Correspondence concerning the manufacture of everything pertaining to book or fine pamphlet work is solicited and will be given prompt attention.

ITEM.

Tarrant & Company, whose drug business has been carried on at 21 Jay Street, New York, since the disastrous explosion which destroyed their property on Warren Street two years ago, have sold their plant including good-will, trade marks, copyrights, merchandise, etc., to M. J. Breitenbach. The sale took place at public auction, June 23, 1902, and the price paid was $51,150. The business will be conducted by a new company of which Mr. E. G. Wells is president and Mr. T. F. Main, formerly the business head of Tarrant & Co., is the manager.

FOR SALE—A good location, for a physician near Buffalo, with an unopposed practice paying $1,800 to $2,000 a year, which will increase through industrious application. Property for sale or rent. Address: Buffalo Medical Journal.

BUFFALO MEDICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

Defects In, and Suggestions for the Improvement of the Reports of Examining Surgeons.[1]

By J. F. RAUB, M. D., Washington, D.C.
Medical Referee, Bureau of Pensions.

NEARLY five years ago, while discussing the duties and requirements of examining surgeons with several of these surgeons who were visiting the bureau, I informed them that I was very much interested in divorcing these agents of the government from the idea that those who were ordered before them had certain peculiar claims upon them. I tried to point out to them that they must not be influenced by the importunities of claimants or their attorneys. I tried to impress upon them the fact that a full performance of their duty consisted in making a full and thorough examination, and furnishing a complete, comprehensive pen picture of the condition found, with even justice to the government and the soldier—that they must always be impartial.

I suggested to them to organise into an association, state or national. I expressed my conviction that such an organisation would result in inestimable good to all, because the meetings would give opportunity to confer about methods, and to discuss plans for improving the service. I was assured then, and have been since, that the suggestion was a good one, and that efforts would be made to secure such an organisation. Nothing came of it, however, until you gentlemen took hold of the matter.

I greet you as pioneers. I congratulate you on your success. I congratulate you on bringing face to face so many of the more

1. Paper read by invitation at the first annual meeting of the National Association of United States Pension Examining Surgeons, held at Saratoga Springs, N. Y., on June 9, 1902.

than 4,500 examining surgeons upon whose faithful, unbiased reports both the government and the great body of Union ex-soldiers necessarily rely for a just adjudication of pension claims. The magnitude of your work and the great interests involved are made manifest by the fact that during the fiscal year ending June 30, 1901, nearly 200,000 examinations were made, as many certificates sent to the bureau, and $910,000 in fees paid therefor.

An experience of eighteen years as an examining surgeon for the bureau gave the present medical referee an appreciation of the labors and responsibilities of the office. His services as a medical examiner and reviewer in the medical division of the bureau for nearly seven years immediately preceding his appointment as medical referee, gave him a very thorough knowledge of the character of the reports, the certificates furnished by examining surgeons.

It was an undisputed fact, admitted by everyone who had to do with the adjudication of claims that, in those days, these reports were, as a rule, incomplete, not sufficiently comprehensive to do justice to the claimants; that very little thought was given to pathological sequence; that either great ignorance was displayed, or inexcusable carelessness manifested as to pathological results. It was then the rule, and not the exception, to accept as a pathological result anything that a claimant might allege, however contrary it might be to the best authorities. Furthermore, boards would complacently declare that because they could not account in any other way for the presence of a certain disability, it was of necessity due to the pensioned cause, notwithstanding there could be no possible connection between them.

A sailor alleged that he contracted "lead poisoning from eating fish that sucked the copper bottoms of ships," and a board of surgeons accepted such a relation.

One board reports that the claimant has "neuritis anterior branches of sciatic nerve from frosted feet," while another says: "Claimant complains of frequent urination, a condition caused by the excessive use of tobacco."

It is the experience of the medical examiners and reviewers of the bureau that too many boards have very little appreciation of their duties, and very little regard for the interests of the claimant or the government. It is too much a question with them of the number of examinations they make and the amount

of fees that may be coming to them at the end of the quarter. The whole system of employment of the members of the boards of examining surgeons is faulty in this: that it fails to guarantee the best talent for these places. And so long as influence alone shall determine who shall be appointed, the bureau will fail to secure the best results.

It too frequently occurs that one is recommended and receives appointment on the ground that he stands well in his community as a general practitioner, but who by reason of lack of education is totally unfitted for the position of examining surgeon; who is not able to construct the simplest sentences correctly, misspells the simplest words, and shows in the description of disabilities an utter lack of professional knowledge, even confounding "mensuration" with "menstruation," "Eustachian" tubes with "Fallopian" tubes, etc.

A certificate was returned to an examining surgeon in North Carolina with directions to report the results of mensuration, palpation, auscultation and percussion of the chest. He returned it with the reply: "I did not know a man mensurated. I never heard of it before and I know no way they can."

A Tennessee examining surgeon declares: "I find him suffering with chronic rheumatism or lumbago of his hips and back, also with some heart trouble as *endometritis*."

A Kansas board reports: "Urine reaction neutral, *ophthalmoscope* reveals mucus and epithelial scales."

A Pennsylvania board reports that "By closing the mouth and nares and blowing, air passes through the *Fallopian* tubes and ears, and can be heard at a distance of twelve feet." Another Pennsylvania board reports "that his stools are thin and triangular in shape."

A Massachusetts board reports the soldier "to be suffering from a severe wound in the *right arm* of a long duration. It has the appearance of a bullet wound entering at the one extremity of the tendo-Achilles and making its exit at the plantaries, just above the elbow, thus producing a partial blood poisoning and necropsy of the bone."

One of the New Jersey boards says: "There is evidence of *astigmatism*, the optic disc is oval and the vascular supply being all perpendicular."

I note these, but a few of the hundreds, to give you an idea of the difficulties that are encountered in the adjudication of

claims—the ignorance, the carelessness and the indifference displayed by many examining surgeons.

It is to the credit of many boards that they take an honest pride in their work and are furnishing satisfactory reports. Their certificates show intelligence, care and thoroughness in the examinations, and an honest endeavor to report the actual condition of those examined. Too many others, however, apparently regard their duties and obligations in the lightest imaginable manner, their certificates bearing evidence of work done in a slipshod, haphazard manner. This faulty work is most frequently apparent in the inaccurate descriptions of disabilities and in the use of practically the same phraseology in describing necessarily varying forms of the same disability in different individuals. For instance, one board in twenty consecutive examinations found valvular disease of the heart and described it in practically the same words in each case. Test examinations failed to confirm these reports.

Many boards apparently have no conception or appreciation of the importance of their duties, and quiet their consciences by submitting machine-made reports that are in the highest degree unreliable and unsatisfactory. One board regarded its duties as fully performed when the secretary, having examined the claimants at his office, merely conferred over a telephone with the other members, after which all of them certified that they were present and personally participated in the examination.

Examining surgeons in their zeal for their patrons constitute themselves, in many instances, the agents of the claimants. I might instance the case of one who during a stated time participated in three examinations of a claimant, in each examination certifying to the fact contained in the certificate showing that the claimant was not disqualified for earning his support by manual labor, and yet, during the same period, filed five *sworn* statements testifying that the claimant was totally disabled for the performance of manual labor.

Both in personal interviews and correspondence, examining surgeons have declared their fears that by recommending just and equitable ratings they would excite the enmity of the claimant and his friends.

I invite attention to the conditions under the present system, to give you some idea of the difficulties with which we have to contend. It is, after all, not wholly the fault of the examining

surgeons, but is, in a large measure, due to the system under which they are employed and assigned to work.

Under the practice which obtains, a board of surgeons is, after appointment, immediately assigned to work and proceeds to examine claimants—without previous instruction and without the remotest idea of what is required and absolutely necessary for the intelligent adjudication of claims by the bureau, and as a result, certificate after certificate must be returned for amendment, for a full and clear description of disabilities, and even then many claims must be medically adjudicated on imperfect and unsatisfactory reports of examining surgeons.

No business man could be induced to place a man in an important, responsible position with no prior experience or instruction in a single part of the work which he is called upon to perform, yet these examining surgeons, without experience, instructions or advice, are appointed and assigned to the work of furnishing to the government the data upon which nearly $140,000,000 are disbursed annually.

It has been the endeavor of commissioners of pensions to bring about a change in the system. I have, year after year, recommended, and the commissioner has urged that these surgeons should undergo an examination to test their scholastic and professional fitness for the place, and that after having shown their fitness, they should undergo a course of instruction in the examination of a claimant, and in the construction of certificates. So far, no disposition has been shown on the part of Congress to make any change, and we must get the best possible results under the existing system.

My excuse for dwelling at such length on this phase of the examining surgeon's duties is the fact that the results of examinations are so unsatisfactory; that many boards fail to understand the importance of their duties, and do not appreciate that the government must be considered as well as the claimant; that the government pays nearly a $1,000,000 a year to the examining surgeons of the Pension Bureau; and that their reports—these certificates—are made the basis for the disbursement of $140,000,000 of the government's money every year.

Many examining surgeons have expressed their fear that in doing their duty fearlessly they will lose the good-will of soldiers residing within the limits of their respective practices. They forget that the medical referee, and through him, the commissioner of pensions must assume the responsibility of dispos-

ing of the claims upon their individual merits. They fail to realise the magnitude of the work; they do not appreciate the fact that the whole output of the annual appropriation for pensions is made chiefly on the reports they furnish and the recommendations they make to the bureau.

Let me cite the following copy of a certificate made in a claim for ventral hernia by a board in a city of Illinois, as late as October, 1898, to give you an appreciation of the difficulties with which the bureau has to contend under the present system, and the necessity of rigid scrutiny of the reports of examining surgeons, and the absolute necessity for reorganising some boards:

We find that when the right side of the abdomen is not supported, the contents drop down into the iliac region. The attachments of the diaphragm have torn loose, the contents of the abdomen have thus fallen down, it is impossible for him to have an action of the bowels, so that it is necessary to raise them up. It causes him great pain when they are down, sometimes rigor. In order to hold them up he has to ware a wide, hard band around the body which has to be stuffed with pleggets of cloth, where it is not perfectly tight. This band has to be as tight as he can possibly make it. Mucous membrane of rectum relaxed. Vessels engorged, one tumor on each side, one inch in diameter.

The medical referee and the more than sixty medical men under him, dispose, on an average, of about 800 claims a day, and necessarily, a large number of these must be rejected, for the reason that many claimants are receiving the maximum rate that can be granted them under the laws, and many others are shown to have no ratable disability.

This responsibility these officials must assume, whatever unfriendly criticism may be passed upon them. Should not the examining surgeons assume theirs as well? The acceptance of the position and the oath of office they take before entering upon their duties, carry with them the promise that their reports will be unbiased and impartial and those who have not the courage to make such reports should resign.

Instead of this, however, too many surgeons, after writing reports, fearing that the bureau will take these at their actual worth, recommend ratings that are not warranted by their descriptions. When the claimants charge that the failure of the bureau to grant a rate as large as they hoped for is due to the report of these surgeons, they say: "We gave you a good rating—it is the commissioner of pensions and those under him who have rejected your claim." You can readily understand how this embarrasses the bureau.

I have said that one prominent cause for the receipt of so many unsatisfactory certificates is the fact that examining surgeons receive no instructions prior to entering upon their duties. No one appreciates this more than the commissioner of pensions and his medical referee. These officials have not the means of correcting this. They must execute the laws, and must do it with the means that Congress gives them.

It was believed, however, that much could be done to assist the examining surgeons by furnishing them with full instructions for their guidance. With this in view, the book of instructions was carefully revised. In its present form it has received the commendation of the Surgeon-general of the Army, and is used in the school of instructions for newly-appointed medical officers of the army. It has been supplemented by special instructions and by a carefully constructed letter indicating the points specially required of examining surgeons. It is believed that any fairly intelligent examining surgeon, if he familiarises himself with these, and has an honest desire to do his whole duty, cannot fail to give satisfactory reports.

There was a time when all that was required of examining surgeons was to give a description of the disabilities for which pension has been granted, or for which pension was claimed. As time elapsed, it was found that this was not sufficient. After a lapse of a quarter of a century since the close of the war of the rebellion, claims began to be filed for disabilities that were alleged to have been incurred during the war and in the service. No record of the existence of such disabilities in service was found in the War Department, and with so many opportunities for contracting them since, it became necessary, so as to protect the government against false claims, to secure, as far as possible, a trustworthy record of the physical condition of each claimant at the first opportunity.

The need of a thorough examination of every disability found, whether alleged or not, became imperative on the passage of the Act of June 27, 1890. This was made necessary under the requirement of the act that each claimant's capacity for earning a support by manual labor must be considered in the adjudication of the claim.

Section 2 of the Act provides "That all persons who served ninety days or more in the military or naval service of the United States during the late war of the rebellion, and who have been honorably discharged therefrom, and who are now

or may hereafter be suffering from any mental or physical disability or disabilities of a permanent character, not the result of their own vicious habits, which so incapacitates them from the performance of manual labor, as to render them unable to earn a support, shall, upon making due proof of the fact, according to such rules and regulations as the Secretary of the Interior may provide, be placed upon the list of invalid pensioners of the United States and be entitled to receive a pension not exceeding $12 per month and not less than $6 per month, proportioned to the degree of inability to earn a support; and in determining such inability, each and every infirmity shall be duly considered, and the aggregate of the disabilities shown be rated.

The book of instructions, edition of 1900, aimed to inform examining surgeons of the differences in the requirements under the general laws, and the Act of June 27, 1890. On its receipt by examining surgeons, the bureau was flooded with letters asking for explanations and interpretations. So little attention was paid to these instructions; such a great degree of inharmony existed between the conditions actually described and the rates recommended; such a large number of certificates were furnished showing indifference and machine methods in the construction; so large a per cent. had to be returned for better descriptions or to have the ratings and descriptions harmonise—in fact, such an utter lack of compliance with the requirements of the instructions was shown, that, on June 30, 1900, a special circular was formulated and mailed to each examining surgeon in the United States.

This circular, as you remember, quoted the second section of the Act of June 27, 1890, as amended by the Act of May 9, 1900, and this was followed by specific instructions, to-wit:

The basis of ratings under this section is inability to earn a support by manual labor due to any mental or physical disability or disabilities of a permanent character not the result of the claimant's own vicious habits. There are *no schedule rates for incapacity resulting from any separate or combined disabilities.* If a pension is allowed under this section, it will be either for $6, $8, $10, or $12 per month, $6 being the minimum and $12 the maximum.

The Act of April 4, 1900, requires that the report of examining surgeons shall specifically state the rating to which, in their judgment, the claimant is entitled. This will be determined by giving due consideration to each and every infirmity, and rating the degree or extent to which all of these infirmities, whether minor or serious, when considered together, render the claimant unable to earn a support by manual labor. The result will be

stated as $6, $8, $10 or $12 per month, and not as 6/18, 8/18, 10/18, etc., nor should there be a separate rating of separate disabilities as heretofore.

When in the judgment of the examining surgeons the aggregate of the disabilities disables the claimant in a degree materially affecting his capacity for earning a support by manual labor, the minimum rate of $6 per month will be stated, and when the claimant is wholly unable to earn a support, or nearly so, by reason of his infirmities, the maximum rate of $12 per month will be stated. For intermediate degree of disability, the rate of $8 or $10 per month will be stated according to the degree of disability.

Bear in mind that the maximum rate of pension under this section is $12 per month, and that even if the claimant should be so disabled as to require the regular aid and attendance of another person, a higher rate cannot be allowed and should not be recommended.

The age of the claimant is an important factor in fixing the rate. A claimant who has reached the age of seventy-five years is allowed the maximum rate for senility alone, even where there are no special pensionable disabilities. A claimant who has attained the age of sixty-five years is allowed at least the minimum rate, unless he appears to have unusual vigor and ability for the performance of manual labor in one of that age. The effect of partial senility should be considered with other infirmities, where there are such, and the aggregate incapacity rated.

The certificate must state whether the several infirmities are permanent, and whether they are the result of the claimant's own vicious habits. Only those which are of a permanent character, and not the result of the claimant's own vicious habits can be considered in fixing the rate.

The certificate must give a full and accurate description of each and every disability in accordance with general instructions issued February 16, 1900.

It is desirable for the proper adjudication of the claim that each report of examination shall contain an exact pen picture of the condition of the claimant and an accurate and painstaking diagnosis of his infirmities in such detail, as to medical terms and descriptions, as will enable the medical officers of the bureau to determine accurately the condition of the claimant.

It was hoped that by a careful study of these special instructions, each board of examining surgeons would be able to furnish satisfactory reports. It is evident that it was carelessly read by many, or not read at all, because the bureau receives almost daily letters similar to the following:

This Pension Examining Board has received several communications from you recently instructing us in our duties as

examiners, but nevertheless, we have to admit that we feel that our understanding of your requirements in our recommendations of ratings under the act of June 27, 1890, are not clear and definite enough, which vagueness we attribute largely to your qualifying phrases, to your definite statements.

By the book of instructions (Ed. 1900) specific rates are named in the tables and among these are five rates below the minimum rate under act of June 27, 1890, and in connection with those rates the first two lines particularly of paragraph 127, Book of Instructions, have led us to giving weight and consideration to such minor disabilities in our aggregate for a rate under the Act of June 27, 1890.

Please advise us whether we shall give weight and consideration to such minor disabilities when two or more of them would aggregate $6, the minimum rate under Act of June 27, 1890.

It must be evident that examining surgeons who will write such a letter can have no conception of the intent of the law or of their duties. What intelligent surgeon, or layman even, would regard an ordinary nasal catarrh, so common in this latitude; the loss of a part or the whole of a finger; slight deafness of both ears, or total deafness of one ear; a few small non-inflamed piles; a slight bronchitis; a varicocele; a small hydrocele; creaking of the joints without limitation of motion; a liver extending a fraction of an inch beyond the accepted average limit; an uncorrected refractive error; a senile arc; a presbyopia; a small ventral hernia; the loss of some teeth; and many other minor disabilities, as disabling a man for earning a support by manual labor?

Every day a number of certificates are received wherein boards declare that the aggregate of disabilities for earning a support by manual labor is due to one or more of these trifling ailments, and recommend a rating therefor of from $6 to $10.

A large per cent. of boards exercise no judgment as to what constitutes a factor in the causation of an inability to earn a support by manual labor. For example, a board in Oregon, under date of April 2, 1902, concludes a certificate with this statement:

We find that the aggregate permanent disability for earning a support by manual labor is due to his disposition and Christian belief, not due to vicious habits, and warrants a rate of $6.

I can account for this only in two ways. First, that no thought is given to the matter, and second, that the members of these boards did not experience the delight of earning their

bread by the sweat of their brows, previous to entering upon their professional career. Surely, if they had the experience in this direction that some of us have had, they could appreciate the fact that even a number of more serious disabilities than these would be no appreciable handicap in the workingman's race for subsistence.

It seems exceedingly difficult for many boards to differentiate between the principle of ratings under the general law and the Act of June 27, 1890.

It appears to me that the whole difference is expressed in this, that under the general law it is a question of a *disability for the performance of manual labor*, for which the ratings range from $2 per month for a very slight disability, to $30 per month for total disability for manual labor; while under the act of June 27, 1890, it is a question of a disability for *earning a support* by manual labor, for which the lowest rating is fixed at $6 per month, and the highest at $12 per month. The disability warranting the maximum of $12 per month under the Act of June 27, 1890, must be practically as great as that which entitles to $30 per month under the general law. Surely it should not be difficult to distinguish the difference in the method of rating under these laws.

Neither the commissioner of pensions, the medical referee, nor the examining surgeons, have any right to let sentimental feelings control the performance of their duties. They must comply with the laws as Congress gives them, and as the secretary of the interior construes them. It is not a question of what you or I would like to do, but a question of doing our whole duty under the laws. It is not a question of what we in our sympathy may believe should be done, but of what the law requires us to do.

Many boards of examining surgeons continued to exhibit great indifference in the manner in which certificates were constructed, gross ignorance of their duties or incompetency to make a thorough systematic physical examination, or persisted in rating on subjective symptoms—the statements of the claimant or the representations of the attending physician, especially if he happened to be a member of the board—notwithstanding instructions to the contrary.

The special letter of instructions of January 3, 1901, was mailed to each examining surgeon, inviting attention to the defects in the examinations and the violation of the instructions.

Each was advised that the commissioner had been compelled to dismiss a number of boards, and that a continuance of such conduct would result in dispensing with the services of those offending.

Boards were also advised by the commissioner that he would "insist that examining surgeons, in rendering opinions as to pathological results, shall be guided by the best and most recent authorities on pathology and not, as is too frequently the case, accept conditions as pathological sequences when neither medical authority nor common sense warrants such acceptance."

Boards were further advised that "An examining surgeon who is not fully informed in the best and most recent authorities on pathology is of very little use to the bureau; on the contrary he is an embarrassment, a hindrance to the proper adjudication of claims." He declared it to be his determination "to secure for the government and the claimants the best talent obtainable, ... and to replace all examining surgons who are found to be incompetent or indifferent, with those who are competent and who are also willing to give their services to the performance of their official duties."

Since then a more careful scrutiny of the certificates has been made, with the result that the services of quite a number of examining surgeons have been dispensed with and other surgeons have been appointed in their places. Now, much better certificates are received, although quite a number of boards do not yet measure up to the standard desired.

Let me invite your attention to some of the more important errors that certificates of examination contain.

One of the most unsuccessful efforts has been that of making examining surgeons appreciate that pensions can only be predicated on objective conditions—on actual pathological changes. It is a very common occurrence for a board to make a statement similar to the following: "Soldier contracted diarrhea in 1864 and has suffered with it since. He has from ten to twenty evacuations daily. Sometimes he passes blood; he is worse in summer than in winter, and we find his disability total, entitling him to $12 per month." Not a single rational symptom is given; the certificate could as well have been written by a layman as by a physician; and yet the claimant was ordered for examination by a physician, for the reason that only a physician could give a diagnosis and sustain the statement of it by giving the rational and physical signs. Such a certificate

is worthless for the reason that the surgeon knows absolutely nothing of the accuracy of the statement. Another form of statement, equally as worthless, is as follows: "Soldier was wounded at the battle of Gettysburg, in 1863, remained in hospital until November and was discharged. He has been unable to earn a support ever since." Again, certificates contain statements like the following: "This claimant contracted rheumatism at Petersburg, 1864; it affects his shoulders, back and hips. His shoulders are stiff, he can only raise arms to horizontal; he cannot stoop to reach the floor with his fingers; he cannot flex thighs, and is entitled to 17/18." The surgeons in stating the time and place of incurrence of the disabilities, certify to that of which they know nothing. It is frequently the case that claimants cannot prove the incurrence as they claim. Even if a surgeon did state it is of his own knowledge, the statement is of no value to the bureau, which must determine all such matters by reference to the records of the War Department.

The question in every case is *what does a careful examination show?* If a pathological condition exists, it should be so fully and clearly described that the medical officers of the bureau can understand the claimant's condition as fully and intelligently as did the surgeon who examined him. To do this a statement of limitation of motion of joints, based upon the claimant's voluntary movements, cannot, for obvious reasons, be accepted as conclusive. It must be based on the results of passive motion, and on this alone. Again, a statement that a claimant cannot stoop to touch the floor with his fingers, or reach it within more than a certain number of inches, furnishes no information. So much depends on the man's occupation, the size of his abdomen, whether he has practised athletic exercise, and, more particularly, his inclination, or rather his disinclination. Only the objective conditions—the pathological change in the physiological structures of the joints, and the muscles of the back, can be taken to determine the degree of disability.

Statements of few or many dejections due to diarrhea prove nothing. A clear, comprehensive pen picture of the conditions of all organs affected by this disease, including the general nutrition, must determine the pensionable degree of disability.

Boards too frequently are influenced by the plaintive story of suffering, made, as a rule, to influence their action, instead of by the actual condition as shown by a careful and thorough

physical examination. They add the value of a rather insignificant disability to the value which their sympathies place on the claimant's plaintive story and rate, probably $24, or even $30, for a disability, their own description of which would warrant from $4 to $8 at the utmost.

If your patience is not exhausted, I will endeavor to point out specifically the most common defects in certificates of examination:

Failure to locate on the diagram all scars and losses of parts; to outline the form and extent of scars, ulcers and varicose veins, and the exact point of amputations.

A general disposition to recommend a rating somewhat in excess—say $2—of that which the claimant is receiving, notwithstanding that the disability is not progressive in character, such as permanently healed gunshot wounds or other old traumatic disabilities.

Duplicating and triplicating descriptions and rates for the same disability or diseased condition, as, for instance, when disease of stomach, chronic diarrhea and malarial poisoning are alleged, the pathological conditions due to which may properly be described and rated under either one of these designations.

Gunshot wounds and other injuries and scars are located on the diagram, and examiners content themselves by saying, "See diagram," without reporting the degree of deformity, loss of tissue, or impairment of motion and power resulting therefrom, although a rating indicating a serious disability is recommended.

The descriptions of rheumatism are often incomplete. One or more joints may be described as affected by swelling or stiffness, without giving comparative measurements and without reporting the degree of limitation shown on passive motion, the condition of other joints, muscles and tendons being left to be inferred by the medical officers of the Bureau.

In reports of the condition in disease of heart, the apex-beat is located so many inches below and to the right of the nipple, instead of by costal interspace and distance from *nipple line*. The conditions shown by auscultation are reported after exercise, instead of after claimant has been at rest. The question is frequently asked, "Why does the bureau refuse to accept the statement, '"the heart is normal?'" I answer, in the first place, it frequently happens that other certificates in the cases

have reported organic valvular disease of the heart, and if the statement, "the heart is normal," were accepted as conclusive, the claimant's name would have to be dropped from the rolls. You can appreciate that it would be unusual and questionable to take such action on a statement of this character. Then, again, from such a statement alone it would be impossible to determine whether or not a careful examination of this organ was made.

The descriptions of the rectum are too brief—do not cover or embrace all the requirements of the instructions.

Failure on the part of boards to equip themselves with test lenses, and to give vision after the correction of existing refractive errors; failure to test vision in accordance with accepted methods. Pension cannot be granted for impaired vision which can be corrected by proper glasses.

The test for deafness is not made in accordance with instructions. While the distance at which the standard tones of voice *cannot* be heard is given, the distance at which they *can* be heard is not given. The latter is just as essential as the former. You will see the force of this statement when you are advised that slight deafness of one ear is "inability to hear ordinary conversation at six feet," and severe deafness of one ear, "inability to hear loud conversation at three feet." It oftens happens that a claimant refuses to admit that he can hear loud conversation at three feet, yet when off his guard, he hears ordinary conversation at one foot six inches, showing conclusively that he can hear ordinary conversation at some distance, and under the practice his deafness can only be rated as slight. Again, a claimant may claim "inability to hear loud conversation at three feet." The question is, does he hear it at any distance, for, under the rulings, so long as he can hear loud conversation at all, even with the lips to the ear, he can be rated for severe deafness only.

Failure to dispose of all disabilities alleged, and to paragraph properly; illegible penmanship; repetition of descriptions of a disability under different heads; separate ratings for each disability, instead of the aggregate rating in claims under the Act of June 27, 1890; rating deafness in eighteenths instead of thirteenths; using the statement "habits good," instead of the prescribed formula; only one witness, or two members as witnesses when claimant's signature is by mark; failure to state whether hernia is direct or indirect, or whether it passes the

external ring; recommending excessive ratings not warranted by the pen picture—these are some of the more frequent defects in certificates.

While examining surgeons are prohibited from revealing the result of an examination to a claimant or other person, and from discussion or correspondence with a dissatisfied claimant, yet they are permitted to make affidavits or statements in pension claims of which they have professional or other knowledge, in the same manner as other physicians.

I have heretofore invited attention to the manner in which this privilege is abused, in the case of an examining surgeon who certified that the claimant had no pensionable disability, and then in a number of affidavits, no doubt furnished for "revenue only," swore that the claimant was seriously disabled.

In these cases, the certificate of examination is the bureau's sheet anchor, but in the claim of a widow under the general law, where her right to pension depends entirely on the death of her husband having been due to a disability of service origin or to a pathological result thereof, the only safety against affidavits that are made in the interest of a claimant, depends on the knowledge the medical officers of the bureau have of authoritative pathological sequences.

Only a few weeks ago a prominent physician of a noted summer resort of New Jersey furnished the death certificate to the state authorities that a pensioner's death was due to valvular disease of the heart. When the widow filed her claim, a sworn copy of this certificate was filed. The only disease for which legal approval could be made was neurasthenia, and consequently the claim had to be rejected on the ground that there was no pathological relation between neurasthenia and the disease of the heart from which the soldier died. The widow made an application for a re-opening of her claim, based on a long statement from the same physician. In this statement he swore that the soldier died from an acute attack of broncho-pneumonia, complicated with an acute attack of la grippe, accompanied with mitral insufficiency, aortic stenosis and general arteriosclerosis; and then argued that all these troubles were the direct results of neurasthenia. Re-opening was denied. He personally came to the bureau to argue the case with the medical referee. To the suggestion that he file a list of the authorities upon which his contention was based, he frankly admitted that he could find none. He further

declared that had he known that his certificate would be used in a pension claim he would have made a different report. When asked why he did not give the death cause to the authorities as neurasthenia, he replied that the state medical authorities refused to accept it, knowing that the soldier died from other causes. He acknowledged that his certificate and subsequent statement contained the actual facts, yet he had the effrontery to declare that if he could withdraw them he would make the statement that the death was directly and immediately due to neurasthenia, so that the widow might get a pension. He was informed that such a statement would not be worth the paper it was written on, in any court, and then to his utter amazement he was informed that had he submitted such a sworn statement, making the so-called neurasthenia the death cause, the claim would necessarily have been rejected on the ground that syphilis could not be eliminated, for the reason that the soldier had a record of primary syphilis, a severe attack of syphilitic iritis, and, subsequently, all the manifestations of tertiary syphilis. This too, was a case of an affidavit "for revenue only." Cases of this character come under observation daily.

The following affidavit from an examining surgeon in Kansas, made in 1898, in another widow's claim, is to the point:

I made a thorough examination of him at that time, and made eight visits from that time until his death. When I made the visit in July I found that the spinal irritation had increased. His bronchitis had become so intense that his lungs was nearly overflowed with mucus and pus. He was expectorating profusely and in great quantity. His lungs was so full that it sounded like abscesses of his lung, but I am of the opinion that it was only an excess of mucus cutting air off from air cells which would give the lung symptoms. I am certain that the original cause of his death was rheumatism which caused paralysis of his back, said paralyzed condition allowed his spine to fall forward which caused pressure upon the spinal cord, and resulted in spinal irritation. The spinal irritation caused the nerves which supply the bronchial tubes and lungs to lose all sensation. Loosing said sensation, the mucus accumulated in excess in bronchial tubes and lung cells causing symptoms of abscesses which so diminish the airating surfaces he could not live. In such condition he died on August 22, 1897. While his immediate death was caused by overflow of mucus and pus in the bronchial tubes, the original cause of his death was rheumatism. The spinal irritation and excessive mucus and pus in bronchial tubes and lungs was

results of rheumatism, causing paralysis of muscles of back, which resulted in spinal irritation and bronchitis and disease of lung tissue.

It is no surprise to the medical officers of the bureau to receive affidavits like this, but when a board of reputable physicians, in a certificate of examination dated February 5, 1902, makes the following statement: Applicant's muscular development is very poor, just why it should be so we are unable to state; the best we can describe it would be to say the muscles are slowly evaporating," it must be concluded that some examining surgeons regard their duties as a huge joke. Perhaps the board was influenced in accepting the theory of *evaporation* by the fact that the claimant's name was *Booze!*

I have said that the certificate of medical examination is the bureau's sheet anchor. It is the rule in the bureau to rely on these reports of examining surgeons and it is not usual to accept any evidence to controvert such reports. You can appreciate, therefore, the embarrassing position in which the medical officers of the bureau are placed when it is shown that examining surgeons have not been candid and honest in their reports, or when their reports show such a lack of general intelligence and professional knowledge as to make them unreliable.

About a year ago an affidavit was filed from a member of a board in Tennessee, declaring that a pensioner who was ordered for an examination under a claim for increase was confined to his house and unable to appear before the board. A member of the board was ordered to visit and examine this pensioner at his home. The surgeon's report showed that the claimant was so totally and permanently disabled as to require the regular and constant aid and attendance of another person. Some doubt was entertained as to the existence of this degree of disability and as to its permanency, because no such claim had been made by either the claimant or his attorney when filing the application for increase. Another member of the board was ordered to make a searching examination. His report confirmed the findings of the first examination, and the three members certified in the certificate of examination that each one was personally cognisant of the fact that the claimant required the regular and constant aid and attendance of another person, and was entitled to $72 per month. The increase was then allowed from the date of the first examination.

As soon as it became known in the neighborhood of the claimant that he was receiving such a high rate of pension, information was filed to the effect that he was not confined to his house at the time of the examination; that he walked to his place of business every day; that he not only personally superintended his business, but every few days drove to a neighboring town about six miles distant. On an investigation made by a special examiner, it was proven conclusively that this claimant had not been confined to his house, but attended to his duties daily. The claimant testified that he had not been confined to his house; that he had not required aid or attendance at any time, except for about two months four years prior to the examination, at which time he had an acute attack of rheumatism; and that he was in his usual health at the time of both examinations. In fact, it was shown, and the claimant admitted, that he was as active as men generally are who are seventy-two years old.

It is taken for granted that there must have been an inducement for making such a report. The board was suspended at once. After a suspension of one year, an application for reinstatement, urged by the member of Congress from that district and by resolution of the Grand Army post of the town, was denied by the present commissioner.

Three months ago another board reported that the apex-beat of the heart of a certain claimant was located under the xiphoid cartilage, the upper border of the heart under the sixth rib and the lower border under the ninth rib, with a mitral murmur. The certificate was returned inviting attention to the almost impossible location of the heart as reported. The board returned the certificate to the bureau insisting that the description was correct. A test examination showed that the apex-beat was at the sixth rib, that the heart was in the normal position, and that all its sounds were normal. The first certificate was rejected because it was unreliable and of no value to the bureau and the fee for examination was disallowed.

Conditions similar to these are encountered daily. Reports of boards lack candor, facts are suppressed, ignorance is displayed. You will, I am sure, appreciate the necessity for vigilance, and a careful scrutiny of the certificates of examination before applying them to the respective claims.

A board in Ohio, in thirty consecutive examinations of young men who served about three months during the war

with Spain, and who were not outside of the United States, reported irritable heart in each case and declared that it was not due to vicious habits. This was so at variance with the experience of the bureau that a special investigation was held. This investigation elicited the information that where the pulse-rate was increased in frequency the heart was reported irritable. When the members of the board were asked to account for the accelerated pulse-rate, they gave it as their opinion that it was due to the excitement of the examination and to cigarette smoking. If this statement had been given in the reports of the board, an investigation would have been unnecessary and the board would have been advised that any disability due to the cigarette habit must be excluded in the consideration of a pension claim under the general law.

In concluding, I desire to express my appreciation of the honor and privilege of appearing before so many of my learned brothers.

It has been our aim for five years to improve the service of examining surgeons. We have but one purpose—that of giving to deserving pensioners all the pension they are entitled to, and to deny pensions to the undeserving. No one could possibly appreciate more than we, the necessity for a full and comprehensive pen picture of their disabilities in the certificates of examination, whereon to predict such pensions. We have aimed to improve the service of the examining surgeon so that claimants might receive what was due them.

The relations between the medical referee and the examining surgeons are necessarily, of a close and confidential nature. This official has always solicited from examining surgeons correspondence relating to any matter in which information was desired and he has always given a prompt reply.

If, perhaps, this paper has been too long, or not as interesting as you may have anticipated, the earnest desire for the very best work obtainable from you must be the apology, and if I have succeeded, at least in a measure, in impressing you with your personal responsibility, I am repaid.

If, perchance, the medical referee has found it necessary to return certificates to any of you; or you have been advised that more satisfactory reports must be furnished, or that a reorganisation of your board must be made, let me assure you that it has been done without malice or feeling, with no thought except for the best interest of those whose claims are at issue,

and of the government, whose interest must also be considered.

I might quote you the familiar saying:

" While the lamp holds out to burn
The vilest sinner may return."

It is the policy of the bureau, as it is to its interest, to make as few changes of examining surgeons as possible. Its officials always protest against the displacement of experienced examiners who give satisfactory results; while, on the other hand, they insist that members of Congress recommend others in the place of those who fail to render satisfactory reports, or persist in violating the requirements of their instructions.

The progressive physician is one who is constantly looking out for that which will improve his mind and therefore improve his services to his patrons. The progressive examining surgeon is one who is on the alert for that which will assist him to make his services more valuable to the interests he represents. He, therefore, enjoys a conference with his fellow surgeons, and profits by an exchange of views. He furnishes the very best reports to the bureau. His certificates are models in every respect.

Your presence here today indicates that *you* are giving satisfactory service; that you have more than the usual interest in the performance of the duties incident to your responsible positions; that you are *progressive;* that you appreciate that, as in the great profession at large, there is benefit in occasionally meeting in a body and comparing methods, in discussing means to ends, in exchanging plans, in brightening your intellectual faculties by bringing them in contact with others.

There should result, and, I have no doubt, there will result, a two-fold benefit. Each one present will be benefited, and the service of the bureau will be benefited. You will gain some new, some beneficial thought, you will look into the faces of many of your co-workers, you will appreciate better the interests you represent, you will carry home with you the remembrance of the acquaintances you have made, and their interest and enthusiasm in their work will be an inspiration to you for years to come. You will have a higher regard for your positions, and a better appreciation of the responsible duties of pension examining surgeons. You will have a more lively realisation that you have an honored and responsible part in the disbursement of $140,000,000 annually to deserving soldiers, their

widows and orphans, and a deeper sense of the necessity for conscientious and comprehensive reports upon which such disbursements must be made, and by rendering which you will honor and dignify both yourselves and your office.

Blood in Its Relation to Surgical Diagnosis.[1]

By A. E. WOEHNERT, M. D., Buffalo, N. Y.

THE question before us is what value, if any, to the surgeon is the examination of blood? Will any of the data obtained by such analysis aid him in the diagnosis or treatment of his patient?

It has seemed to me that the surgical part of the profession here in Buffalo was rather lukewarm in regard to the newer diagnostic methods. Judging from the articles one sees in the journals, this is true elsewhere. An article appeared in one of the leading journals some months ago, based upon the examination of blood in one case of appendicitis, condemning such examination on account of failure in this particular instance. I am not going to try and convince you that the results obtained by the examinations are infallible, but that in a great majority of cases the blood can be relied upon to give information either in a positive or negative way.

The analysis of the blood by modern methods includes the estimation of the hemoglobin, the determination of the specific gravity, and the count of the erythrocytes and leucocytes. The general morphology of the red cells and the differential counts of the leucocytes are obtained by the stained specimen. The rough estimation of the fibrin present with estimation of coagulation time should be made in proper cases. The hemoglobin, estimated by one of the colormetric methods or by means of specific gravity, is of value in a prognostic sense in surgery. All things being equal, the patient whose hemoglobin is near the normal point has a better chance to withstand the shock of a severe operation than one whose iron is markedly deficient. Operative measures of any kind become dangerous in patients whose hemoglobin is much below 50 per cent., and where possible should be postponed and therapeutic measures employed to bring the coloring matter near the normal standard.

1. Read before section on surgery, Buffalo Academy of Medicine, February 4, 1902.

I have seen two cases of pernicious anemia within the year who narrowly escaped operation for cholelithiasis on account of the lemon tint characteristic of this form of anemia. A simple estimation of the hemoglobin in such a case would have made this mistake impossible.

The Justice test is of value in suspected syphilis, and depends upon the diminution of the hemoglobin in specific cases when mercury is administered. There may be a fall in twenty-four hours from 10 per cent. to 15 per cent. in the syphilitic cases, whereas in the non-syphilitic cases no such fall is observed. In the matter of shock, the estimation of hemoglobin is of value in separating the nervous form from that due to hemorrhage.

The administration of iron in all cases should be governed by one of the instruments of precision. Many times an anemia apparently exists when none is present. The red cells of the blood are of some importance to the surgeon. They are maintained at near the five million mark in the normal individual. There are slight variations in number throughout the day, but not more than two or three hundred thousand to the cubic millimeter. Any great variation would point to serious constitutional disturbance. Roughly speaking, when the red cells are near the one million mark in number, pernicious anemia is usually the underlying cause; between one and two million, we might have pernicious anemia, cancer, leukemia, chlorosis, and extreme secondary anemia, as the cause. The reduction of the reds to three or four million may be due to a large variety of causes, including chlorosis, pernicious anemia, leukemia, and the secondary anemias due to many causes.

The study of variations in the general appearance of the erythrocytes, as seen in the stained specimen, is also of value. The normal cells differ very slightly in their size and shape. The essential anemias are characterised by great variations in this regard. The general picture of a stained specimen of pernicious anemia is that of increased size of individual cell or macrocytosis. Poikilocytosis or irregularity of contour is also characteristic of this form of anemia. Chlorosis is characterised by small cells or microcytosis. In both diseases large and small cells may be found. The secondary anemias, on the other hand, even where great reduction in the number of cells is found, are not so apt to show this peculiarity. Nucleated cells are commonly found in severe oligocythemia from any cause, and their prevalence is an index to a certain extent of the

demands made upon the blood-making organs of the individual. The severer the process at work, the more nucleated cells found and the more embryonic they become in type. The large nucleated cells or gigantoblasts are typical of pernicious anemia.

Many times the reds may take not only an acid, but alkaline stain as well. Very often the protoplasm is filled with small blue granules. This polychromataphilia and granular degeneration is found in toxic conditions of the blood. In these particulars the study of the red cells may yield information of value, often being diagnostic or pointing to an underlying cachexia or toxemia. They always give an index to the general condition of the patient under observation.

The study of the number and kind of leucocytes is the most interesting and important part of the blood examination to the surgeon. The count should be made with the special pipette. Toison's solution and red counter often giving misleading results on account of high dilution unless the special counter chamber is used. The blood should be taken at a stated time, as long after a meal as possible in order to do away with the digestive leucocytosis. A simple count is not sufficient and may lead to erroneous interpretation. I have often found a leucocytosis of 14,000 to 15,000 in cases where pus was suspected, but the increase was in the young cells or lymphocytes. A differential count is necessary in order to arrive at a correct result. The estimation of the leucocytosis, made by examining the fresh blood, is proper as a preliminary test or where differentiation from malaria is desired. We should not base an opinion on such a procedure alone. Most failures in the blood as a diagnostic factor can be attributed to incomplete analysis and slipshod methods. In important cases a single examination is not sufficient any more than a single urinary examination, and positive results should not be expected from such examinations.

The history is often of great importance to the hemotologist in order that he may arrive at a correct conclusion. The blood analysis, like that of the urine, can only be counted as a single item in summing up a given case. The leucocytes in the normal blood number about 7,500 to the cubic millimeter, and are made up of four varieties of cells, namely:

Polymorphous or adult cells	66 per cent.
Small lymphocytes	26 " "
Large lymphocytes	6 " "
Eosinophiles	1 " "

Physiologically, we have increase of leucocytes after meals, during pregnancy, after hemorrhage and after a bath. Pathologically, the leucocytes are increased in a variety of conditions. We have a leucocytosis in many non-surgical infections —in pneumonia, which may serve as a type, the leucocytes may reach twenty or thirty thousand.

In the pyogenic infections, blood count is often invaluable. In all pus infection we have a leucocytosis of a polymorphous variety. There are certain rare cases where the pus has been thoroughly walled off, or where, through overwhelming numbers or virulence of germ, no reaction occurs. One such case has recently come under my observation. A patient after confinement had remittent temperature for some weeks with loss of weight and strength, with occasional sweats. The blood analysis gave 3,280,000 reds; leucocytes, 10,600; polymorphous cells, 85 per cent.; hemoglobin, 50 per cent.; fibrin not increased. In spite of the blood showing no leucocytosis, several ounces of pus were found on operation.

A second case—a woman who had been treated a year for malaria. The blood analysis gave the following results: leucocytes, 23,800; polymorphous, 84 per cent.; hemoglobin, 60 per cent. This case had been a very puzzling one, and after blood examination a renewed search was made; pus was finally found in the pelvis.

In a number of appendix cases reported last year in which blood analysis was made, when the leucocytes numbered 15,000 or over, pus was found. Increase in the number of leucocytes meant a spread of the process, while a drop in leucocytes heralded an improvement in the case. The progress of a pyogenic infection, especially in the appendix, can be followed with accuracy by a daily leucocyte count.

The blood of cancer where cachexia is present often shows a leucocytosis, even where secondary infection or ulceration has not occurred. This may be brought about by the cancer organism. The leucocytes may reach a considerable figure. The study of the erythrocytes, which show considerable change in size and shape and the presence of nucleated cells, will help to differentiate. The fact that fibrin is decreased rather than increased is also of value to differentiate from pyogenic process. Moreover, the increase is often in lymphocytes rather than the polymorphous leucocytes. The absence of leucocytosis is as valuable and conclusive as its presence in many instances.

Occasionally one comes in contact with cases which are puzzling and may be one of several conditions where treatment would radically differ. The presence or absence of a leucocytosis may settle the nature of the case. As an example, a year ago I saw a little girl who had had some pain in the region of the appendix for the previous ten days. When seen by me, she had a temperature of 102°; pulse, 120, was chilly, and there was tenderness and rigidity over McBurney's point. She had some coryza and conjunctivitis. Whether this temperature and pulse were due to appendicitis or oncoming measles, I could not say. A blood examination was made. The leucocytes numbered 6,000. Thirty-six hours later she had a well-developed measle eruption. The tenderness over the appendix was present for some days however.

We occasionally run across obscure abdominal cases, ofttimes ushered in with a chill or chilly sensations. These cases are perplexing. It is important to know whether we have to deal with typhoid, appendicitis, or some other inflammatory abdominal condition. Here, blood analysis is invaluable. The presence of a Widal reaction is diagnostic of typhoid. A polymorphous leucocytosis speaks for appendix or other inflammatory process. The presence of an eosinophilic leucocytosis may be diagnostic of trichinosis. In the presence of a splenomegaly, the blood is also of value. Leukemia is easily detected by the enormous increase in leucocytes, the majority of which are the characteristic myelocytes. The presence of polymorphous leucocytosis with characteristic changes in the reds and fibrin decrease may mean cancer. Where fibrin is increased, abscess of the spleen or embolism from aseptic endocarditis may be suspected. Absence of leucocytes where the plasmodium is not found points to splenic anemia.

Thus the blood in the present state of our knowledge may be of considerable value in differential diagnosis. In the course of time we may be able to test the quality of the serum and arrive at an exact knowledge of its composition. We may have serum tests for the commoner infections and be able to supply the various antitoxic serums necessary to combat them. At the present time we can, with justice, say that the study of the blood is important and valuable as an aid to differential diagnosis. Not always positive in its conclusions and often diagnostic in a negative way.

155 Allen Street.

The Treatment of Insomnia of Pulmonary Tuberculosis.

By S. C. REISMAN, M.D., New York City.

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ONE of the most difficult and troublesome conditions to control effectively in pulmonary tuberculosis is the insomnia which so frequently accompanies this disease. A tubercular patient when he does not enjoy the recuperative influence of refreshing sleep undergoes all the tortures of Dante's condemned spirits.

This insomnia is due to various causes; either to excessive cough from the accumulation of secretions in the bronchial tubes, the irritating night-sweats, pleuritic pains, or to mere nervous excitability.

The effect of loss of sleep in these patients is to drag them nearer the approaching end. They become despondent, lose all hope (and the sufferer of this malady when he is able to sleep is, as we know, hopeful to the very last breath); they lose their appetite; the eyes bulge out of their sockets, and acquire a wild stare as in one demented—a group of symptoms which I can instantly recognise as a result of a loss of that "chief nourisher in life's feast," sleep.

Knowing the causes of the insomnia, the rational method of treatment is the employment of means to eliminate these disturbing factors. We are, however, but rarely able to accomplish this, and we are forced to treat the condition symptomatically; to resort to some measure that will produce undisturbed sleep, and shortly after its administration.

As it has been my fortune to treat a large number of patients suffering from this dread disease, and being dissatisfied with the numerous deleterious by-effects of the hypnotics of the pharmacopeia, I thought it worth while to investigate one of the newer sleep-producing remedies, named hedonal.

Professor Dreser, in his painstaking report on hedonal, explicitly states that the drug has absolutely no injurious effects on the heart, circulation and body temperature, and that it is completely oxidised in the system into water and carbonic acid, and hence I felt convinced that there was no danger of an accumulation of the drug in the body. I was further assured by several medical friends who had already employed this remedy that they had observed no toxic symptoms during its

use, and though still distrustful I commenced to employ this remedy.

As a result of my careful investigation of hedonal I can most heartily confirm the opinions of its most enthusiastic admirers. The remedy has proven most valuable to me in the class of patients referred to. I have found it to be rapid and reliable in its action, non-irritating to the gastrointestinal, circulatory, or genitourinary systems, and devoid of after-effects. It has pronounced advantages over the older hypnotics, being superior to both morphin and chloral hydrate. It is better than morphin in two respects: first, it does not engender any craving; second, it does not produce any of the after-effects of morphin—namely, headache, nausea, disagreeable taste in the mouth and constipation. Over chloral hydrate hedonal has manifold advantages. It produces calm, refreshing sleep, even if the patient is suffering with pain; it creates no drug habit; it causes no gastric irritation, and at the same time it allays the harrassing bronchial sensitiveness.

I believe that hedonal will also be found valuable as a sedative in nervous diseases of a functional type and in conditions of cerebral congestion and irritation. I have not as yet, however, had sufficient opportunity to test it to my satisfaction, but I feel warranted in at least hinting at its expanded field of usefulness. I should be pleased to hear from my colleagues who have had experience with the use of hedonal in such diseases.

The following cases will serve to illustrate the mode of action of hedonal:

Case I.—F., a laborer, 31 years of age, a native of Poland; mother and sister both died of tuberculosis. He had been under treatment for three months, and complains of tingling in the throat, night sweats, moderate cough. His appetite is good and he is able to eat everything. Examination revealed crackling râles and broncho-vesicular breathing over both apices. Diagnosis: pulmonary tuberculosis. Under the administration of creosote he had been doing well. One week ago he was seized with a severe cough paroxysm. This kept him awake for three consecutive nights. It was a pitiful sight to see the remarkable change for the worse when he entered the dispensary. His eyes were bulging, glistening and staring, with dark rings around them. His appetite was gone, and he longed for death to release him from his troubles. I prescribed a powder of 30 grains of hedonal for the relief of the insomnia, and asked him to call at my office the next morning. The

change at this time was striking. He had had a good night's rest, sleeping for 14 hours. During this time he awoke but once, falling quickly asleep again. He told me that his cough was quieter. I gave him 15 grains of hedonal and 1-24 grain heroin hydrochloride for the following night. This dose was not sufficient to produce the desired result. The next day he received 30 grains, which acted satisfactorily. The case is still under observation.

Case II.—J. G., a blacksmith, aged 43, has advanced tuberculosis of the left lung. His chief complaint was loss of sleep. He had a fair appetite, only slight cough, and moderate night-sweats. I gave him 15 grains hedonal, which secured a good night's rest. On the second night no effect was obtained from the 15 grain dose, which was increased to 25 grains. Sleep was produced, and the patient felt better in consequence. He has been receiving creosote all the time.

Case III.—R. B., trained nurse, 22 years of age; family history good; father and mother both living and in good health; brothers and sisters are well. The patient had been in good health till six months ago. For three months before this she had been in attendance upon a woman in the last stages of pulmonary tuberculosis. She apparently acquired the disease from the inhalation of germ-laden air, her strength being undermined. I found roughened breathing and dullness over both apices; temperature, 100° F.; pulse, 110; breathing rapid and shallow. Her body was poorly nourished and the lips cyanotic. She complained particularly of her inability to sleep at night, because her mind would not be quiet. I gave her 20 grains of hedonal and some creosote pills. After taking hedonal she enjoyed restful sleep with no after-effects.

Case IV., M. H., female, aged 47, complained of great weakness; had not had a good night's sleep for a month. She says she is very weak; has no appetite, and can barely walk. On examination I found a large cavity in the right lung. I prescribed 30 grains of hedonal and for the cough 1-24 grain of heroin hydrochloride. She returned in two days and reported feeling somewhat better, having slept after taking the powder for twelve hours, interrupted once by coughing. Hedonal was continued one week with no bad effects and an improvement of appetite.

Case V.—M. C., child, aged 11 years—an old tubercular case—compiains of restlessness and sleeplessness. The cough was bad. After 15 grains of hedonal she slept soundly for six hours. The same dose repeated the next night afforded a sleep of eight hours' duration.

I have tried hedonal in eighteen tubercular patients and not in one instance has it failed to produce the desired effect. Of

course, in many instances, I had to add heroin hydrochloride, 1-24 grain, to the hedonal in order to first quiet the cough.

The description of other cases would be but a repetition of the excellent sleep-producing properties of hedonal. I hesitated long before using the drug, as most physicians do with new remedies, but after my experience I can heartily and confidently recommend its trial. I believe it is destined to replace in many instances the established remedies where we desire a pure hypnotic free from all possibility of injurious action.

220 East 78th Street.

Menstruation—Normal and Abnormal.

By C. A. BUTTON, M.D., Holland, N.Y.

IT WAS lately stated by a correspondent in a medical journal that ovulation continued through gestation and lactation; the menstrual function has also been spoken of as a depurifying agent; and many cases have come under observation where abnormal menstruation has not been successfully treated and where malignant growths have passed beyond surgical aid, due to a failure to recognise the true condition. The normal process in woman is regular and painless, and its abnormal occurrence presents diagnostic features indicating various pathological conditions which, though often of minor importance, and sometimes of grave import, are too often lightly passed by, the physician attributing the trouble to age or some other cause without a careful investigation; hence this paper on menstruation, both normal and abnormal.

First, taking up normal menstruation, what is it and why does it occur? In all forms of life, both animal and vegetable, we find the same cycle—birth, propagation of the species, death. In both the animal and vegetable world a certain amount of growth and development is attained before the function of reproduction is established, at which time activity of the generative organs involuntarily begins. Thus the blade of corn grows without attempt at reproduction until of sufficient vitality to nourish and ripen its fruit, at which time its silk is developed and awaits impregnation by the pollen from the tassels; and if this occurs it goes on to maturity and reproduces its kind, thus propagating the species; but if the tassels of the field be clipped and the waiting silk fails to receive impregnation, then there is no further use for that which was designed and developed by

nature to take a specific part in reproduction and it degenerates and is cast off. This is what occurs in some form in all of the animal and vegetable world, and is an analogue of that which causes the menstrual flow in woman. Each plant and animal has its own special time for fecundation and gestation.

Nature has designed that during a certain period varying with individuals, woman shall prepare for and nourish those elements which develop into a new being, thus propagating the species, and to that end a Graafian follicle is matured and its ovum discharged about every 28 days, and in anticipation of and preparatory for this event, the uterus undergoes those changes necessary to fit it to receive and nourish an impregnated ovum; the endometrium becomes many times thicker, soft, highly vascular and thrown into folds ready to receive, envelop and nourish it, the vitality of the entire organism being drawn upon and centered in this process; if impregnation fails to occur, diverted nutrition is again turned toward the upbuilding of the general system and the superfluous tissue of the uterus, for which there is now no use, undergoes degeneration, the eroded capillaries bleeding to a more or less extent, which, together with the ovarian discharge, all mixed with mucus is discharged, constituting the menstrual flow. Hence the menstrual function is not a depurative, but simply an elimination of waste tissue which nature designated to be used in propagating the species but, failing of an impregnated ovum, is of no further use and is cast off.

The question naturally arises, is ovulation the cause of menstruation? Some have cited cases of menstruation continuing after double ovariotomy to prove that it was not, but they fail to show that a supernumerary ovary did not exist; and the cases cited were operated upon after the menstrual function had become thoroughly established and which might continue for a time through influence of past ovulation over the organism.

The menstrual function does not concern the generative organs alone, but involves the entire being which sends extra vitality through its nervous and circulatory system to those organs at the expense of the balance of the tissues, and the ovary in developing its ovum, is the influential factor causing those changes to take place in other tissues preparing to receive it; hence the influence of ovulation over the organism induces those changes which result in menstruation when nature's plans for propagating the species are not fully met, and may thus be

said to be the cause of normal menstruation. Ovulation can be readily observed in the domestic fowl, where gestation takes place outside of the body; though diverted by man to his use as food, the egg is designed by nature only for reproduction, and as soon as the fowl begins to sit upon her eggs, which is her period of gestation, her production of eggs ceases only to be resumed after her brood has been reared or otherwise disposed of. And it is the same in woman; when conception takes place ovulation ceases until after delivery, and usually through lactation if not prolonged beyond the usual time, although there are exceptional cases where ovulation begins soon after delivery, even where the mother is nursing her child.

Having considered the physiology of normal menstruation, now let us consider the pathology of abnormal menstruation. First, taking up amenorrhea, we will pass its physiological occurrence before puberty, during pregnancy and usually lactation, and after the menopause and take up its pathological occurrence, which may be due to either local, constitutional or accidental causes. Among the local causes may be absence of some of the organs, as ovaries or uterus, or atrophy, or disease of the same, or we might find a sealed cervix, either congenital or acquired, and in this latter case the woman might be retaining the menstrual flow, the uterus enlarging each month and in a way simulating pregnancy. Among the constitutional causes are chlorosis, other forms of anemia, general debility, chronic wasting diseases, especially tuberculosis, delayed development and the like, while shock, sudden chill or wetting of the feet is the usual accidental cause. Thus it will be seen that it is very important to locate the cause before beginning treatment, for while emmenagogues, hot foot and sitz baths, etc., are proper for accidental causes they are entirely out of place and poor practice if due to constitutional or local troubles. If mechanical, the obstruction must be removed; if constitutional, build the system up to a point where the vitality of the organism is amply sufficient to prepare for and nourish an impregnated ovum and emmenagogues will seldom be needed.

Second, dysmenorrhea is perhaps the most common menstrual trouble among women; a few come to the physician for treatment, while many suffer on trying only domestic remedies for temporary relief. This trouble is nearly always curable if correct diagnosis is made and proper treatment given. Sometimes the pain occurs before the flow, ceasing, however, when it

begins; sometimes it continues during the entire course and occasionally it occurs both before and after the flow, being absent during the discharge. Among the causes are endometritis, congestion of the organs contiguous to the uterus, constricted cervix, sensitive nerve endings and a hypersensitive nervous system.

Here, again, diagnosis of the cause is the first and important point to determine, the routine administration of sedatives and narcotics, regardless of the cause is poor practice and usually gives unsatisfactory results as regards a permanent cure. An obstructed cervix requires such surgical treatment as the nature of the obstruction indicates. Congestion may be combatted with rest in bed, counter irritation, hot applications, cupping and similar remedies, together with the administration of uterine sedatives. Endometritis may be treated medicinally with intrauterine irrigations and applications, or surgically by curetting and packing. The medical treatment will be found effective and preferable in many ways for a large number of cases. If gonorrhea be a contributing cause it must receive appropriate attention; irrigation with protargol, beginning with ½ per cent. solution and gradually increasing the strength as the tolerance of the uterus will bear it up to 2 per cent. and perhaps sometimes to 5 per cent., will usually be found satisfactory in gonorrheal cases. For sensitive nerve endings or in any case where a uterine sedative and antispasmodic is required, elixir cramp bark comp., a teaspoonful in a wineglass of hot water, repeated in half an hour if necessary, will be found valuable.

If the courses are irregular and painful, correct any constitutional trouble present and beginning about ten days before the proper time for menstruation, give one-third of a teaspoonful liquor sedans in a little water every three hours until the flow begins, then give the elixir cramp bark comp. if required for pain during the course; repeat for a few months and a permanent cure will usually result, the courses being regular and painless.

Menorrhagia rarely occurs as a pathological condition requiring treatment, except when accompanied with metrorrhagia. The normal flow of women varies greatly both as to length of time and quantity, and if the courses are regular and painless, interference is not indicated unless the loss is sufficiently excessive to produce symptoms, as anemia, vertigo, prostration, and the like, in which case the patient should be put in

the prone position and kept so for a prolonged period of time and the flow regulated, for which purpose frequent small doses of hydrastis, hamamelis (if a good article), tr. cinnamon, or ergot will be efficient; then pursuant to a permanent cure the cause should be sought after which may be found to be a debilitated system, an impoverished blood stream, a predisposition to hemophilia or other similar conditions. When the cause is located treatment will be self suggested.

We will now pass to that form of abnormal menstruation which results from pathological conditions, always serious and often very grave—conditions from which many a poor sufferer has lost her life which often might have been saved had they been recognised and treated in time. Many times the fault lies with the woman in not seeking advice early, but too often it is in the physician's attributing the trouble to age or some other cause without a thorough investigation to ascertain the true condition. I refer to metrorrhagia; this always indicates a pathological condition usually located in the uterus or its appendages, in the form of endometritis, displacements, lacerations, adenoid growths or malignant disease. Although most of these may appear at any age, yet some of them are more liable to occur during certain periods in life than at other times; hence age is an aid to diagnosis; thus in a young woman we would look for endometritis and displacements, in the child-bearing period we would look for endometritis, displacements, lacerations, fibroids and polypi; while near the menopause it is very likely to be fibroids, polypi or malignant disease, and after the menopause, malignant disease is most often the trouble. Metrorrhagia occurring near the menopause should never be attributed to the climacteric, but an examination always made, submitting scraping of tissue to the microscope if necessary; for malignant disease if present and recognised early may often be eradicated by surgery, when left till other tissues are invaded, it may be too late and the case hopeless.

Polypoid growths should be removed, but with interstitial fibroids it depends on conditions present whether surgical interference is advisable or not; if the patient is near the climacteric, the menopause favors their absorption, and if there is not uncontrolable hemorrhage, pressure, or other symptoms of sufficient magnitude to call for immediate action, it is better to wait, alternating terms of ergot with hydrastis, in small doses, keeping watch of the tumor to detect softening and ascertain as

to its change in size; if it ceases to grow, its absorption may be expected, but if it continues to grow rapidly, surgical interference will doubtless be required. Very many, however, will cease growing and be absorbed. In malignant disease, if recognised early, surgery may add many years to the patient's life; hence I repeat, in metrorrhagia always make a thorough examination of the uterus and all of the uterine appendages in an aseptic manner.

I have attempted in this paper to give hints which may lead to the mitigation of suffering, or induce more diligent and thorough investigation as to the cause of menstrual troubles, especially metrorrhagia, when occurring near or after the menopause, to the end that lives may be saved.

Intratracheal Medication.

By EDGAR A. FORSYTH, M. D., Buffalo, N. Y.,
Laryngologist, Rhinologist and Otologist to the Emergency Hospital.

DISEASES of the larynx and of the respiratory organs have been treated by intratracheal medication since 1838 when Horace Green, of New York, passed a small sponge saturated with a solution of nitrate of silver through the glottis into the trachea. In 1840 he reported 15 cases of severe laryngitis and bronchial diseases which had been cured by this means. In 1854 he injected into the lungs through an elastic tube passed through the larynx into the bronchi 1½ to 2 drams of strong nitrate of silver solution; his patients grew stronger, breathed better and increased in weight. From October, 1854, to February, 1856, he treated 106 cases, of which 71 were cases of tuberculosis. Of the tubercular cases, 32 were considered as cases of advanced tuberculosis, and 39 as cases of early tuberculosis. Of the advanced cases 25 were more or less improved, their lives being prolonged; 7 were not improved at all. Of the 39 cases of incipient tuberculosis, 12 had apparently recovered at the time the report was written and 5 more were nearly well; of the remaining 22 cases, 17 were greatly improved, 3 were moderately benefited and 3 were not improved at all. Of the 28 cases of bronchitis 16 were cured and all of the others greatly benefited. In 6 cases of asthma treated by injections the disease was entirely removed in all but one.

Several years later Horace Green published another paper in which he said he was using milder solutions and added "such

has been the amount of success which has continued to attend this plan of treatment that I am now ready to affirm, after an experience of many years in a field of observation unusually large, that if I were required to relinquish all other known therapeutic measures or topical medication, I should choose the latter with hygienic means alone, in preference to the entire class of remedies ordinarily employed in the treatment of these diseases. During the three or four years since my report of 106 cases, I have treated large numbers of patients afflicted with chronic laryngeal and bronchial diseases, with asthma and tuberculosis, and the success which continues to attend this practice has served to increase greatly my confidence in this measure as a therapeutic agent."

The advantage of the intratracheal injections over the usual methods of treatment in tuberculosis lies in the fact that the antiseptics used enter at once the field of their labors unaltered and penetrate to the farthest limit of the respiratory space and coming in immediate contact with the toxins as they are generated bring about the beneficial results without interfering with the digestive organs.

Colin Campbell, in the *Lancet* of September 11, 1897, says there can be no doubt about the absorption of the drugs by the lung tissue, as he has injected into the trachea of patients each week one quart of fluid. If not absorbed, what becomes of it? Experiments made by Dr. Pernice show that liquids injected into the trachea run down the posterior surface and are thence evenly distributed through all the bronchial twigs and are absorbed by the pulmonary veins or by the lymphatic vessels and thus exert both a local and a systemic action.

Dr. C. G. Coakley in the *Medical Record* of February 8, 1896, reports results of a series of experiments conducted at the Loomis laboratory. He made a solution of India ink, filtered it and injected ten cubic centimeters of the filtered solution into the trachea of rabbits and the animals were killed in from fifteen minutes to two hours. It was found in every case that not a trace of the pigment could be found in the trachea, bronchi or alveoli, but that all had been absorbed.

I began giving intratracheal injections in February, 1897, and since that time have given a great many and have never seen any bad effects. Spasms of the glottis have never occurred and the patients are not opposed to taking them, as a rule. I remember only one patient who said he could not take them.

Most of them experience so much relief they say they wish they could have them more often. With this treatment the expectoration becomes greatly reduced in quantity and much less offensive; the purulent element disappears and expectoration resembles the frothy expectoration of simple bronchitis; fever and night sweats disappear and patient gains in weight.

Quaiacol and similar preparations frequently produce ill-effects when taken by the mouth and have to be discontinued; opiates are not required, as intratracheal injections accomplish all that can be done by their use. J. A. Thompson, in the *Therapeutic Gazette* of October 15, 1898, says that in the hospital for consumptives, with which he is connected, cough is never treated by opiates if the patient is able to go to the treatment room and be given a tracheal injection. These injections he finds relieve the cough more satisfactorily than any internal medication. In cases in which the cough is so excessive as to cause vomiting and nutrition is in consequence rapidly failing the placing in trachea of 1 to 3 drams of a 2 per cent. solution of menthol, an hour before eating, will permit of both the ingestion and assimilation of the essential nutriment. By this method the detrimental effects of the use of opium and its derivatives to control the cough are entirely avoided.

The diseases most suitable to this form of treatment are pulmonary and laryngeal tuberculosis, pulmonary and laryngeal syphilis, chronic bronchitis, inflammation of trachea, asthma and bronchiectasis. Lactic acid is used mostly for laryngeal tuberculosis when there is ulceration, but these applications are painful and pain often lasts for hours. Patients dread the treatment, but the intratracheal injections give such relief at once that the patient enjoys taking them.

R. Lake advises intratracheal injections for granular cords and superficial excoriations or ulceration, and reported to the Laryngological Society of London, June 8, 1898, a case of cured laryngeal tuberculosis. There was an ulcer on each cord and one on anterior part of cricoid cartilage. He gave daily intratracheal injections of a solution of naphthalene, 3 per cent.; oil of cinnamon, ½ per cent., in parolene.

W. Freudenthal has been using intratracheal injections of menthol-orthoform emulsion with good success in regard to pain; the ulcers will heal but return to disappear again after treatment.

The solutions I use are menthol 7½ to 15 per cent., guaiacol,

½ to 3 per cent. in benzoinol or alboline. Europhen, 1 to 2 per cent., may be used in place of the guaiacol. The patient will be nervous about first few injections, so I spray or apply with applicator a 2 per cent. solution of cocain to the larynx. After a few injections this may be stopped. I use instrument suggested by Joseph Muir which has a capacity of half an ounce. One to 4 drams may be used. Muir in one case of purulent bronchitis administered an ounce at one sitting.

Injections are made about the same as laryngeal applications. The patient grasps the tongue with the right hand, drawing it forward, at the same time throwing the head back and opening the mouth as widely as possible. The operator holds the laryngeal mirror in one hand and syringe in the other and proceeds as though he were about to make a laryngeal application. As soon as the tube enters the cavity of the larynx the epiglottis is pulled slightly forward, the patient is instructed to breathe, the cords separate, the tube enters between the cords, and the syringe is emptied of the desired amount. By pointing the instrument to either side the bulk of the medication may be made to enter either the right or the left bronchus. It is not necessary to introduce the end of the syringe below the vocal cords, as results are just as good when end of syringe is placed above them and then medication reaches all parts of larynx as well as trachea and lungs.

J. L. Barton says all the cases of tuberculosis he treated by this method were markedly benefited, while those having laryngotracheitis and bronchitis were rapidly restored to health, and one case of asthma was greatly improved.

My results with intratracheal injections have been very encouraging and certainly will cause me to use it in preference to any other in cases of laryngeal and pulmonary tuberculosis. My patients experience great relief from the injections and increase in weight; some of them have gained as much as seventeen pounds, while only one lost in weight, and he had been losing rapidly for some time. While under my care he lost three pounds, but he was working out of doors at night in all kinds of weather. He did not remain under my care more than two months, as he lost so much sleep by coming to my office he had to give up treatments. It was a case that was very unsatisfactory, as his visits were not frequent enough to do him any good.

I do not believe intratracheal injections will cure every case

of laryngeal or pulmonary tuberculosis, but do believe it is the best method of treating these diseases we possess at the present time. I know I have had ulcers heal and the patient improve in every way, but these cases are sometimes very difficult to manage, as they will not come to your office when they are feeling well and are able to go to work, as one case did after treatment. Before I began injections he had been unable to work for one year, and had been sick for eighteen months; complained of cough, pain in the chest, shortness of breath, pain in the throat, hoarseness; swallowing either solids or liquids was painful, slight elevation of temperature; pulse, 104; lost a great deal in weight. Examination showed pulmonary tuberculosis with ulcers in the larynx. His wife died twelve years ago with laryngeal tuberculosis, and one brother died of tuberculosis. He received his injections for six months, when he said he had increased in strength, coughed less and felt so well he wanted to go to work. He was a carpenter and went to work on a new house at a summer resort on the lake shore. He began work in the spring and slept in the house, which was only partly finished, during very bad weather and contracted a cold, which made him come back to me for further treatment, but as soon as he felt better he discontinued treatment and went to work again. I saw him once after that and he was feeling quite well.

The most interesting case I have treated by intratracheal injections is that of a man 33 years old, a tailor. When he came to me he gave the following history:

Had been hoarse for over one year, more marked during the last six months; had been taking injections of tuberculin. He began treatment with me March 23, 1900. Examination of his lungs showed pulmonary tuberculosis; larynx showed infiltration and ulcers; sputum examined showed tubercle bacilli. I treated him until April 9, 1900, by local applications without much relief, at which time he discontinued his visits; he resumed treatment May 10, 1900, when he said his condition was much worse than when I saw him last. He had a great deal of pain in his chest, coughs a great deal, spits blood, raises a great deal of purulent sputum. I began giving him intratracheal injections of menthol, europhen and alboline. I gave the injection every other day, using 2 drams, and on alternate days used 50 per cent. lactic acid. The tuberculin was stopped. On May 31 he had gained 4½ pounds, coughs less, spits no blood and feels much stronger. He was very faithful about taking his treatment and as he received more benefit from the injections than from the lactic acid I stopped it after a short time and

gave him the injections every day. He gained in every way; ulcers in larynx healed up, no cough or pain in the chest; he gained in all eleven pounds and so much in strength that he was able to do a great deal of work; in fact, as much as ever—lift and carry large, heavy bundles.

I kept him under my care after he noticed all these improvements and gave him two or three injections a week, as he was afraid he might not be able to get along without them. After a while he discontinued treatment, and I did not see anything of him until November 19, 1901, when he came to my office to report that he was still feeling well. I had his sputum examined and report showed no bacilli. I saw him last, August 31, 1902, when he was in good health and working hard every day.

I believe this case demonstrates what intratracheal injections will do for laryngeal and pulmonary tuberculosis. He also received tonics and was advised to be out in the air as much as possible.

I know more cases of tuberculosis would recover if they were given intratracheal injections, their nutrition carefully looked after, and the rules of hygiene closely followed.

326 Franklin Street.

ABSTRACT.

Cerebral Hemorrhage.

By SYDNEY A. DUNHAM, M.D., Buffalo, N.Y.

Report of Case Following Injury to Spine.—Cerebral hemorrhage, properly speaking, means hemorrhage into substance of brain. If it follows an injury it may occur in any part of the encephalon. When into the meninges it is meningeal. When into the ventricle it is called ventricular. It is rare into the cortical substance, unless following traumatism. It may be directly under site of injury to the cranium or contrecoup.

I was present at autopsy one year ago where a young man was struck on right side of head, producing severe hemorrhage into substance of brain on left side. In the present case which I have reported the injury was on dorsal region of spine with no history of injury to the head, yet a hemorrhage was found into right cortical substance near the fissure of Rolando. In this case the hemorrhage was slow. Patient walked home, being a little dazed at the time. Slight hem-

Read before Buffalo Academy of Medicine, September 9, 1902.

iplegia of left side developing on the third day, when he sent for a physician. Left patella reflex exaggerated. Patient grew gradually worse until death, two months after injury.

There was no mental confusion, but drowsiness at times during first few weeks; no change in pupils, no disturbance in speech, no facial paralysis. The arms and legs would alternately be better and worse. The patient walked about the house the first week, ate well and slept well, expecting each day to be able to resume work.

No accurate diagnosis made until at autopsy. It is well to say, however, this man had suffered some from heat stroke a year before, which was followed by apparent epileptic convulsions. This indicated a vulnerable center in the brain.

A Perplexing Question in Traumatic Cases.—Did patient become unconscious and fall, producing the wound, or did the wound cause the unconsciousness? The physician must decide independently of the witnesses present, although a previous history of the case may corroborate your opinion.

The Difficulties.—The location and size of blood clot. Is there disease of arteries, heart, or kidneys? Is the case complicated by opium or alcoholic narcosis? Cerebral apoplexy is common in acute alcoholism after fifty years of age.

Pearce Bailey in his book on Accident and Injury, says in some fatal cases of traumatic cerebral hemorrhage mental symptoms exist without any focal sign.

If then patient is unconscious how are you to make a diagnosis?

Differential Diagnosis in the Following Similar Conditions.—Where there is deep coma with complete relaxation; hemorrhage into the ventricles or pons; opium and alcoholic narcosis, and uremia. It is difficult because hemiplegia cannot be ascertained; because albumin may be found in urine of each; because convulsions are not infrequent in each; because all special senses are paralysed; because the pupils are often contracted.

What can be done toward definite diagnosis.—Examine head for injury, examine heart and condition of arteries, examine urine for sugar and albumin, examine reflexes, examine presence or absence of rigidity or relaxation of either side and take the temperature, which is usually low in hemorrhage. Get history of case and don't give out your diagnosis for twenty-four hours.

Differential diagnosis between intracranial hemorrhage and alcoholism is not easy and mistakes are common. The physician censures the police when a man is kept in station house all night as drunk when he has cerebral hemorrhage, or fractured skull. The older physician criticises the younger men of the profession when a patient is turned away from the hospital as intoxicated, when he has cerebral hemorrhage. The people blame the profession generally for their lack of skill in these cases.

The whole trouble is in a snap diagnosis. The physician should remember that deep coma from cerebral lesion associated with alcoholism cannot always be differentially diagnosticated on the spot. That physicians who attempts it will now and then make serious mistakes. The entire difficulty could be removed by having a detention hospital, or a hospital which has an isolated room to receive such cases. The police tell us the hospitals would be kept busy if they should send all cases of unconsciousness to the hospital and the hospital authorities claim that they would continually have a nuisance in their wards. These statements are exaggerated. There are not very many patients found on the street in deep coma and who need hospital care. A hospital should always receive these cases, but they need not be kept any longer than to have a positive diagnosis made.

Why should a hospital keep delirium tremens patients who endanger the lives of those sick from disease or operation and yet turn away with an uncertain diagnosis one brought to the hospital for admission in an unconscious condition. If any should go to jail the delirium tremens patient should be moved first. Why should not a hospital have a proper room padded and isolated for those suffering from delirium tremens when the disease is so common and serious?

The hospital is the place for these cases when isolated, but never should they be put in the ward with others or where they may disturb other cases. It is too frequently done. Hospitals should meet these demands.

239 Delaware Avenue.

TO KEEP COCAINE.

R	Cocaine hydrochl.	gr. iv.
	Acidi salicylici	gr. ss.
	Aq. dest.	$\overline{3}$iij.

—*Jour. de Med. de Paris.*

CLINICAL LECTURE.

The Study of the Urine Without a Microscope.[1]

By BYRON H. DAGGETT, M. D.
Genitourinary Surgeon Buffalo Hospital Sisters of Charity, Erie County, St. Mary's Infant and Maternity, and Riverside Hospitals.

MACROSCOPICAL examination of urine furnishes valuable data in a clinical record. Such an examination is easily done and reveals clinical questions otherwise unattainable. No great amount of technical skill is required, no complicated apparatus is necessary. The results of such an examination are plain and easily understood. The urine of the male should be collected in an open-mouthed bottle, and that of the female, when accurate analysis is necessary, should be drawn by the catheter.

If urine is to be examined within twenty-four hours of its passage, antiseptics are not required, but if kept longer than a day some antiseptic, as thymol or chloral, should be added—only a few grains are necessary.

In all cases where the urine escapes in drops, or none is passed, the question of retention or suppression should be decided by passing a catheter or by percussion. These means differentiate between retention and suppression.

Quantity.—The amount of urine passed in one day should be determined by measurement, and repeated at intervals, in all important cases. The urine should be examined as a routine measure in all cases. Kidney diseases existing for unknown periods, unsuspected by the physician in attendance, have been subsequently revealed by careful examination of the urine.

A healthy adult of average weight will pass from 40 to 60 ounces per day—1200 to 1800 c.c.

Cold, digestion of large quantities of fluids will largely increase the daily amount. Catharsis, skin temperature, vascular conditions, vaso-motor disturbances, nephritic diseases, choked condition of the kidneys from metabolic products, irritants and poisons decrease the amount passed.

Color.—Normal urine is the color of amber or light straw. Neubauer and Vogel give a scale of nine colors ranging from a pale yellow to a brownish black, which are due to natural pigment or admixture of foreign coloring matter. The peculiar color of normal urine is due to a nitrogenised principle known

1. A clinical lecture to the nurses of the Buffalo Hospital Sisters of Charity, May, 1902.

by a variety of names, viz.: urrosaccin, urochrom, urohemetin, uroxanthin and purpurin.

Its ultimate composition is not settled, although it contains C.O.H., N and probably iron. It is supposed to be much like the coloring matter of the blood, and probably formed from hematin, the coloring matter of that fluid.

Blood tinges urine from a smoky hue to many hues of red; bile and santomin make it yellow; rhubard, brown; carbolic acid, smoky, and methylin blue an intense blue color; sulphur browns the urine; rheumatism and fevers make it brown.

Odor.—The odor of fresh urine is slightly aromatic; its cause is unknown. The temperature is nearly 100° F. when passing. The use of certain foods and medicines change its odor remarkably. For example, asparagus, cauliflower, turpentine and the balsams. Bile pigment gives it a faint odor of chloroform, and it has a putrid odor when intense intestinal putrefaction is going on. Its decomposition begets an odor of ammonia and alkaline reaction, if it occurs in the bladder; acid reaction if the pathologic condition occurs in the kidneys.

Transparency.—Normal urine is always clear—transparent. To determine whether it is transparent or not, you must use a test-tube or a glass vessel. You cannot decide this quality by looking into or upon the fluid in an opaque vessel. You must look through it.

Reaction.—Normal urine is acid in reaction, and its acidity is due especially to the acid alkali-phosphate. It may be due to the presence of a free organic acid, but the rôle played by free acid is unimportant, and the fact of its presence is a mooted question. Sometimes directly after a meal the urine is alkaline, but this phenomenon soon disappears, and it has no clinical significance.

The alkaline carbonates and salts of the vegetable acids taken into the stomach render the urine alkaline. It may seem curious that both alkalies and vegetable acids have this effect, but physiological chemistry accounts for this phenomenon.

The reaction of urine is usually tested by blue and red litmus paper. You must note whether the urine is alkaline when voided, and after standing for a time. Note also whether the alkalinity, if present, is due to the volatile (ammo. carb. from breaking up of urea), or the fixed alkalies (alkali-phosphates) taken into the body as food or medicine. To determine this point, the red litmus, turned blue by the urine if exposed for a

time to warm air, will return to its red color, but if the reaction is from fixed alkalies it will remain blue after drying. Sometimes the same urine will turn blue litmus red, and red litmus blue. This phenomenon is called amphoteric, and has no satisfactory explanation and no symptomatic value, so far as we know.

Bradshaw, of Liverpool, maintains that litmus should not be employed for testing the reaction of the urine, because solutions of the salts of phosphoric acid are never neutral to litmus: that if the urine is not distinctly acid or alkaline it is amphoteric.

For this reason Bradshaw advocated the use of phenolphthalein as an indicator of acidity, and maintained that objections to its use are not valid. The teaching is that acidity of the urine is diminished after meals. Bradshaw found, after making 160 estimates of the acidity of urine, that in health the acidity followed a fairly regular curve; high during sleep, it fell rapidly after "getting up," and remained at a minimum until about noon, after which it rose steadily and reached a maximum about 9 p.m.

He claims that the degree of acidity is apparently diminished or increased by a more or less bulk of water present, and that alkalies and other diuretics only apparently lessen the amount of acid by dilution and by combination.

Specific Gravity.—In normal urine there are about 967 parts of water and 33 of solids to the 1000, specific gravity about 1,020; this quality varies from 1015 to 1030 within the range of health. As a rule, the lighter the color the greater the quantity passed within 24 hours. A high gravity indicates a large amount of solids—a low specific gravity indicates a diminished amount of solids. A large amount of solids indicates great activity of the granular epithelial elements of the kidney. The amount of solids excreted in 24 hours is from 60 to 70 grams—960 to 1,120 grains.

Urinary insufficiency is a condition in which the amount of solids is abnormally diminished, without reference to the bulk of water. The kidneys are the great safety valves of the system, filtering from the blood the poisonous waste of the living, active organs of the body, as well as any foreign substance found in the blood.

The waste, or excrementitious matter of the body is held in solution in the urine and consists of nitrogenous elements and salts. We call them solids to distinguish between them and their menstruum.

The solids are the distinguishing characteristics of urine. They make urine heavier than water, hence the importance of knowing the specific gravity of urine, and as it varies from hour to hour to know the gravity of a 24-hour product.

A ready rule for determining the total excretion of solids is as follows: multiply the last two figures of the gravity by the number of ounces passed in 24 hours, and this product by 1.1; this will approximately give the total solids in grains, and a good estimate of the excretory activity of the kidneys.

Solids of human urine, according to Flint, are: (1) urea; (2) urate of soda, neutral and acid; urate of ammonia, neutral and acid, small quantity; urate of potassa, a trace; urate of lime, a trace; urate of magnesia a trace; hipporate of soda, potassa and lime; lactate of soda, potassa and lime; creatin; creolin-oxalate of lime; xanthin; chloride of sodium; chloride of potassium, hydro-chlorate of ammonia; sulphate of soda, potassa and lime, acid and basic; phosphate of magnesia; ammonia-magnesium phosphate; silicic acid; urrosaccin, coloring matter; mucus and gases.

The urea and chlorides are present in a large percentage, so that the specific gravity is mostly due to these substances. The other substances are present in small quantities and some only in traces.

Urea is the most constant of the urinary constituents, and exists in the greatest quantity. It is one of the most interesting constituents of the urine—it rids the body of 90 per cent of its waste nitrogen. "It is the most important end product of proteid metabolism." 20 to 40 grams are excreted each day. Urea forms 2 per cent of the normal urine. It is probably formed in the liver, at least it is much decreased in quantity in atrophy of the liver.

It is increased by cold bathing, exercise, and a meat diet. It diminishes in disease attended by emaciation. It disappears from the urine in uremia. Its diminution indicates epithelial impermeability of the glandular epithelium of the kidney, and if persistent it indicates Bright's disease.

The retention of urea arrests the osmotic processes of the cells, elimination ceases and so-called uremia results from an accumulation of the end products of proteid metabolism. Urea is the natural diuretic, yet if it fails to perform its function of elimination of by-products, it is indirectly poisonous. Urea is found in several fluids and solids—muscles and liver—of the body.

It is a nitrogenous substance and is derived from the waste of nitrogenous matter. It is one of the few organic principles that can be produced synthetically by the chemist.

Uric acid, creatin, creatinin are other products of proteid metabolism. Uric acid is probably produced by the liver; it is non-poisonous and has no clinical significance. It is more important as an indicator of other processes than its own formation and presence would signify.

Uric acid has been given as a cause of many maladies, but recent investigations indicate that it is not so bad after all. It does not cause gout, rheumatism or neuralgia. It is not a strong poison, for sufficient alkali to neutralise its effect is more harmful to protoplasm than the acid itself. It may deposit spontaneously from urine allowed to stand a few hours or upon the addition of hydrochloric acid. There is no simple clinical process for its elimination. Its proportion to urea is 1 to 30, 1 to 100, and Haig says 1 to 350 in extreme cases.

Indican is an ingredient of normal urine. It is the product of intestinal putrefaction. It is increased in all conditions which beget intestinal decomposition—appendicitis, peritonitis, intussusception, and the like. There are other aromatic products of intestinal disturbance whose importance cannot be determined.

The ethereal sulphates are derived from proteid putrefaction; the other sulphates maintain their normal relation with urea. There are from 10 to 15 grains of chloride of sodium excreted each day. This amount is diminished in pneumonia and fevers.

The chlorides are next in amount to urea. They are almost entirely the potassic and sodic salts. They diminish in repose of the body, in all acute febrile diseases and in chronic affections. They increase with a salty diet, with energetic bodily or mental exercise, in intermittent fever and dropsy. The normal inorganic constituents are taken into the system with the food.

Three and one-half grams of phosphoric acid in combination are excreted daily. The phosphates are increased in febrile conditions by animal food, by the introduction of phosphatic compounds. They are decreased in urine of low gravity in kidney and heart diseases, in disorders of digestion and chronic brain diseases.

Blood may find its way into the urine from the kidneys, bladder, or urethra. Blood pigments, from the destruction of the blood cells in the circulation, may appear in the urine. Both darken the urine. The presence of blood in the urine may

be shown by putting into it a few drops of the fresh tincture guaiac, which gives it a faint blue color.

In addition to the normal constituents, there are often found in urine abnormal accidental substances which change its appearance and character.

The urine is a complex fluid; as I have intimated, there is yet much to be learned about its character and composition. It contains poisonous and other qualities not yet revealed to human knowledge. Fresh, normal urine is not baneful, but it readily changes or decomposes, creating a insidious poison.

The urine is one of the most reliable guides for estimating the variations of waste and nutrition. All diseases can not be diagnosticated by urinary examination, yet no serious pathological condition can exist for any length of time without creating some urinary change, some manifestation of disease.

By frequent examination of the urine the physician may know whether his case is gaining or losing ground. Life insurance companies exact a careful chemical and microscopical examination of the urine before issuing policies for insurance. Surgeons require examination of the urine before attempting important operations. During the latter months of pregnancy the urine should be examined once each month and the last month once a week, in order to be forwarned of danger. Deficiency of urea signalises the approach of an eclamptic storm.

These clinical data are therapeutic guide posts along the medical highway: (1) Color, (2) odor, (3) reaction—neutral, acid, alkaline, (4) specific gravity—1010 to 1028, (5) quantity —24 hours' product, (6) amount of solids—8 to 1200 grs., (7) albumin, (8) blood, (9) pus, (10) sugar.

723 Ellicott Square.

The older methods of treatment for epistaxis (*Clinical Review*) while ordinarily reasonably positive and satisfactory, must give way to the newer method of the employment of the extract of the suprarenal gland. Not only is the application of this solution followed by almost instantaneous blanching of the mucous membrane and stoppage of the hemorrhage, but it has a very wide range of effect. Except in aged persons with a cardiopathic condition causing the epistaxis the method is universally applicable and valuable.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine.

Reported by F. W. McGUIRE, M. D., Secretary.

Stated Meeting, September 9, 1902.

The meeting was called to order by the President, Dr. Herman E. Hayd at 9 p.m.

The minutes of the last stated meeting, held May 20, 1902, were read and approved.

The council recommended the election of Dr. Edgar R. McGuire for resident membership. He was duly balloted for and elected a member of the Academy. The council also recommended the election of Dr. Eugene A. Smith as trustee to fill out the unexpired term of Dr. Howell.

It was moved and seconded that Dr. Smith be nominated for the office of trustee to fill the vacancy caused by Dr. Howell's resignation, and on motion the secretary was directed to cast a ballot for Dr. Smith, who was then declared elected.

The program of the evening was provided by the Section of Medicine. It consisted of a paper read by Dr. Floyd S. Crego entitled,

SYPHILIS OF THE NERVOUS SYSTEM.

A paper was also read by Dr. Sydney A. Dunham, entitled,

CEREBRAL HEMORRHAGE FOLLOWING INJURY TO THE SPINE.

The papers were freely discussed by Drs. Blaauw, Frost, Dunham and Crego.

Adjourned at 10.20 p.m.

PROGRESS IN MEDICAL SCIENCE.

Pediatrics.

Conducted by MAUD J. FRYE, M. D., Buffalo, N. Y.

FEEDING OF PREMATURE INFANTS.

Chapin (*Theory and Practice of Infant Feeding*) says: The author has tried all kinds of incubators and believes that only those having a fresh air inlet connected with the outer air are safe to use. If such an incubator is not obtainable, an ordinary soap box

may be improvised, in which the baby is placed done up in cotton and surrounded by hot water bottles. The top of this box may be partially covered with a sheet or towel, so arranged as to allow free access of air. The babies at first seem to do best at an average temperature of 85° to 90°. The less the infant is disturbed the better; at the same time proper cleanliness of the baby and incubator must be insisted on, as these infants are very vulnerable to infection of all kinds. The most important factor in raising them is to secure breast milk. The milk must be drawn from the breast after the colostrum period, the preferable time being from about eight days to a month or so postpartum. Usually this must be diluted one-half with boiled water or sugar water solution. The best way to feed is by means of a medicine dropper, drop by drop, very slowly, care being taken to see that one drop is swallowed before another is given. This extra care is required from the tendency of fluids to get in the windpipe. The author has seen a number of deaths from this cause, as shown by autopsy.

When the infant is too feeble to swallow, a catheter, used as a stomach tube must be employed. It can be passed without removing the baby from the incubator. As soon as the baby grows older and is strong enough, a small nipple may be substituted. The exact amount to be given a premature baby must depend upon the period of uterogestation and its apparent development. In one case, weighing only 2½ lbs., a dram every hour was given by the author with good results. In better favored cases, from 4 to 8 drams can be given every hour or two. If the infant thrives, in two or three weeks it can be given pure breast milk at two-hour intervals. Without breast milk the chances of a premature baby are very poor. Both the fat and proteids of cow's milk are digested with difficulty in these cases, so they must be given in very small amounts. The milk must be diluted to represent fat, 1 per cent. sugar, 3 per cent. proteids, one-third of 1 per cent. (one-tenth nine-ounce top milk, plus one-thirtieth sugar) of which a dram may be given every hour, to be gradually increased if tolerated. At the eighth month a little stronger mixture may be borne, such as fat, 1.5; sugar, 5, proteids, ½ to ¾ per cent. (one-eighth to one-fifth nine-ounce top milk and one-twenty-fifth sugar.) Feed from 4 to 6 drams every hour and a half. When ordinary cow's milk cannot be digested, a trial may be made of whey, expressed beef juice, egg water or highly diluted condensed milk.

THE MANAGEMENT OF RHEUMATIC CHILDREN.

CRANDALL (*Archives of Pediatrics*, August, 1902,) presents a most excellent paper calling attention, first, to the frequent distribution of rheumatic symptoms in childhood through months or even years, and to symptoms which are rarely seen in adult life. He says: The management of the rheumatic child may be considered under four headings: clothing, exercise, diet, medication. The rheumatic child should wear flannel at all seasons, though in summer it may be of thin texture. Its value as a means of prevention is too well-established to be doubted. Cold and wet feet should be especially avoided. The exercise and out-door life of rheumatic children should receive particular attention. There is a strong tendency on the part of the mothers to confine such children to the house too closely and thus render them the more susceptible to cold. Days of damp, east winds, particularly if the ground be covered by slush or melting snow, are especially favorable for the development of rheumatism. Concerning diet the trend of opinion seems to be in the direction of restricting sugars and starches, and not so much the nitrogenous foods. The rheumatic child is prone to be anemic and a plain generous nourishing diet which contains some nitrogenous matter is best. For acute cases the writer allows milk, broths or plain soups, together with weak lemonade and oatmeal water for thirst, returning to a more general diet as soon as possible.

Proper care of the throat and the removal of adenoid growths and enlarged tonsils are important prophylactic measures. The writer uses the salicylic treatment for acute rheumatism and in children, with a marked rheumatic tendency, he believes that he wards off acute attacks by giving salicylate of soda for one or two weeks out of a month, continued for a long period of time. Children suffering from any rheumatic manifestation, even chorea, if the latter be severe, should be kept in bed to prevent possible heart complications. Give iron or iron and cod-liver oil early in convalescence.

SUMMER DIARRHEA OF INFANTS.

SHUTT (*Jour. Am. Med. Assn.*, August 2, 1902,) discusses the cause, prevention and treatment of summer diarrhea. The treatment may be summarised as follows: clear out the alimentary canal. If there is no nausea, give castor oil; if

there is, calomel in 1-10 gr. doses. Irrigate the large intestine, using the high enema with either a weak boric acid or normal salt solution. The temperature of the irrigation may be determined by the child's temperature. If the child vomits repeatedly the stomach may be washed out. The child, whether breast or bottle-fed, must be taken off milk at once, and not returned to it till the stools become normal. For the first twelve hours or more give no food, but allow cold boiled water to drink. Later, allow egg water, rice water, animal broths, barley water, either plain or dextrinised, and liquid peptonoids. The latter may be given in amounts of ½ to 1 teaspoonful in water every two hours till the stools become normal. For fever use cold sponging. After the bowels are thoroughly cleaned out bismuth subnitrate, in 10 gr. doses, every two hours, till the stools become dark, is usually given, and later, if the cause for diarrhea is dependent on increased peristalsis, small doses of opium in the form of Dover's powder or paregoric.

ACUTE ARTICULAR RHEUMATISM IN AN INFANT.

Barcus (*Archives of Pediatrics*, January, 1902,) reports a case of acute articular rheumatism seen in an infant twenty-seven days old. There was no history of chorea or tonsillitis in the parents and no pus focus in the infant which could have caused an arthritis. When five months pregnant the mother had suffered from muscular rheumatism. The case presented the symptoms which go to make up the classic picture of rheumatism—the character of and successive joint affection, the sour sweat, the characteristic rheumatic temperature, the control of the symptoms by the salicylates, and probable heart complication.

Genitourinary and Syphilitic Diseases.

Conducted by BYRON H. DAGGETT, M.D., Buffalo, N.Y.

STONE IN THE KIDNEY.

A. H. Cordier (*International Journal of Surgery*, Nov., 1902,) states that it is some twenty years since Henry Morris, of London, deliberately and successfully removed a stone from the kidney. The fear of hemorrhage stayed the progress of kidney surgery for many years. When it was demonstrated that the fear was groundless, kidney surgery took rank among the

justifiable and legitimate surgical procedures. The result has been a notable epoch in surgical history and the advance in kidney surgery has been unexcelled in any other department. The surgery of the kidney should be prophylactic and its purpose to prevent the destruction of the function of the organ.

Early diagnosis and early operation are called for in all surgical affections of the kidney. The advance of kidney surgery has demonstrated that nephritic calculi are more frequent than was previously thought and that lumbago, neuralgias and perinephritic abscess were often the results of nephritic calculi.

Urinary fistula will become less frequent when nephrotomy is done early in the case.

A wound in the healthy kidney will heal as readily as one in any other organ, so that the surgeon is justified in making an exploratory nephrotomy. Pyonephrosis and hydronephrosis are late manifestations of stone in the kidney and should be anticipated by an early operation. A stone in the kidney is a menace to life and to the function of not only the affected organ, but also its fellow, as calculous anuria is often sympathetically developed.

Stone may form in the kidney at any age and its composition varies according to the age of the patient; in children it consists of urate of ammonia, in adults of uric acid, while the phosphatic and oxalate of lime calculi are common in patients past 40 years of age.

These stones may vary in number from one to a hundred, and in size from a grain to several ounces, their shape differing according to size, location and composition.

It may be that several years elapse in the development of a stone of any magnitude, yet a phosphatic calculous may form very rapidly. A stone too large to pass through the ureter will develop symptoms indicating its presence. If small it may pass through the ureter without producing any manifestations of its existence. Such a calculous may pass the urethra or lodge in the bladder and act as a nucleus for a cystic calculus.

If the stone lodges in the ureter, it causes intense pain, retraction of the testicle, irritable bladder, transient anuria, followed by polyuria and blood, after its passage. Atypical cases demand study, diagnosis and relief.

If the stone is held in the pelvis of the kidney a characteristic group of symptoms are presented. Nephritic colic indicates the passage of a calculus through the ureter and this

may be followed by a quiescent period of months or possibly years without recurrence. Hemorrhage and pain may be caused by exercise or jolting of the body. *Kidney* pain is located in the region of the kidney. A calculus may intermittingly block the ureter and cause intermitting hydronephosis; if infected, pyonephrosis. Permanent obstruction makes the condition continuous. Extensive infection of the pelvis causes the characteristic enlargement, and if the ureter be patent, abundant amount of pus may be found in the urine.

Cystitis is a permanent symptom of calculous pyuria. A calculus in the kidney always threatens functional safety.

In cases of large stones and suppuration, diagnosis is easy. A history of renal colic, lumbar pains on one side, uric acid and oxalate of lime crystals in the urine, tenderness, recurrent hematuria warrant a sufficiency of diagnosis to justify an exploratory incision. This procedure is safe and harmless.

Alkaline Saliva.

Saliva freighted with germs being constantly swallowed, may produce fermentation in the stomach, which results in eructations, sour stomach, headaches. Clinical experience shows that a small portion of a suitable alkaline solution will quickly correct the disorder. If the saliva is kept in its normally alkaline state, or in excess of normal, it seems to assist digestion instead of interfering with it.

The physiology of the mouth and stomach are so related that a remedy which will arrest putrefaction and fermentation in one organ, may do so in another and mild alkalies are most acceptable for this purpose.

The saliva must be utilised for disseminating an antiseptic and antacid, so that the cavities of decay will be penetrated by it.

Something must be used which will act upon mucous membrane for the purpose of keeping it in health or restoring it when it shows signs of disorder. The ingredients of such a preparation should be agreeable to each other and acceptable to the stomach, for the saliva passes in almost a constant stream to this organ, a fact too little considered in the treatment of the mouth.

Alkaline saliva seems an undoubted aid to digestion and if it can be induced to flow and be kept alkaline, many stomach disorders will disappear. The mucous membrane under the action of glyco-thymoline (Kress) becomes hardened and normal, and naturally offers greater resistance to disease; the daily application of the remedy as a mouth wash does much good, maintaining an alkaline or normal condition.—*Clinics.*

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EDITOR:

WILLIAM WARREN POTTER, M. D.

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Virchow.

THE passing from earth of Professor Virchow which happened September 5, 1902, at his home in Berlin, closed the career of one of the most remarkable medical men that lived during the nineteenth century. So much has been written and published both in the medical and lay press relating to the character and professional work of this great man that nothing new can be evolved here, hence we shall be content to present merely a general review of these tributes gathered from the *New York Tribune* and other sources.

Rudolf Ludwig Karl Virchow was born at Schievelbein, in Pomerania, Prussia, October 13, 1821. When he had reached the age of eighteen years he went to Berlin to study anatomy and physiology at the university. After four years of application he took the degree of doctor of medicine, and was soon appointed to an assistant's place in one of the Berlin hospitals. Here he was placed in charge of the autopsies performed on all who died in the hospital. After three years of this kind of experience Virchow decided to enter on an academic career. He became a privat docent of the Berlin High School, at the same time retaining his hospital position. It was during this period of hospital work that Virchow made important discoveries relative to the white blood-corpuscles.

In 1847, when he was only twenty-six, Virchow founded the *Archiv. für pathologische Anatomie und für klinische Medizin*, a journal which has now passed its 160th volume, and which has been the means of promulgating many discoveries of the highest value to the medical profession. Since 1852 Virchow had sole charge of this publication.

From 1849 to 1856 Virchow held a professorship in the Pathological Academy at Wurzburg. During those years he became interested in the study of anthropology, making what has been described by Dr. Ernst von Bergmann as "the first effective anthropological investigation"—a study of Cretinism, that form of imperfect mental development accompanied by a correspondingly deficient physical development. In later years Virchow made important collections of skulls, implements, weapons, and the like, for anthropological museums. In 1879 he co-operated with Schliemann in the excavations on the site of ancient Troy.

In 1856 Virchow returned to Berlin as professor of pathological anatomy, of general pathology, and of therapeutics. At the same time he became director of the new pathological institute, which had been founded at his instance, and in that position continued until his death. His marvelous industry in the collection of pathological records and microscopical preparations was rewarded by the erection of the splendidly equipped Pathological Museum of Berlin.

He was in many respects a wonderful man. His contributions to scientific literature made his name known and honored in all parts of the world, and despite the fact that he was a hard and industrious worker in his chosen field, he found time to take active part in politics and became there, as in the scientific world, a shining light.

Last October Virchow's eightieth birthday was celebrated by medical men and publicists all over the civilised world. At his own home all classes of the community did him honor. His remarkable physical powers astonished his friends. He spoke at that time for more than two hours, and in a speech to which great men from all parts of the world listened described the development of pathological science.

In his youth he was a "forty-eighter," but did not cease to take interest in public affairs after the revolution, like many of his compatriots. He became a City Councillor of Berlin in 1859, and held the place for forty-two years. In 1862 he was elected a member of the Prussian Chamber, and was a member of that body when he died. He was not an ornamental member, but one of the working body, and as chairman of the committee on finance rendered valuable service. For thirteen years he was a member of the Reichstag, but was displaced in 1893 by a social democrat.

In person Virchow was of less than the average stature and of winning and attractive manners. "His expression," said one of his students recently, "is that of extraordinary courage; his attention once drawn to you, you feel as if he were fixing you in focus on the object glass of his mental microscope." But there was nothing unfriendly in this gaze. Indeed, his manner frequently deserved the adjective "charming," particularly at the dinner table and on social occasions, and few great men have been distinguished by like modesty and unselfishness. His worldwide travel gave him additional breadth of mind and a recognition of the aspirations and achievements of other nations which was quite free from any narrow bias of nationality. When he went to England in 1898 to lecture before the Royal Society of Medicine, his speech was most generously appreciative of the labors and achievements of English scientific men. Indeed, he may be said to have taught the English to value the forgotten name of Glisson, while in Italy he informed the Italians of their debt to Morgagni. For America and American aspirations he always showed great interest, understanding and appreciation, although he never visited this country.

He celebrated his golden wedding on August 25, 1900, and that occasion, like his seventieth and eightieth birthdays, gave his admirers, including all classes from the poor student to royalty, opportunity to show how dear to them and how much they appreciated the "grand old man of Germany."

The entire scientific pathology of today has grown up from the foundation laid by Virchow. In 1858 his work on Cellularpathologie was published and it has become one of the classics of medical literature. It marks the dividing line between ignorance and knowledge. Whatever claims the memory of Virchow may have to perpetuity, and they are many, his first must be in the reconstruction of theories and teachings relating to pathology and the placing of them upon an enduring foundation.

His next great claim to preëminence is the sanitary reforms that he persistently advocated relating to the city of Berlin. For forty-three years he was a conspicuous figure in the municipal council of that city and under his watchful eye it has been changed from a cesspool of filth to the most sanitary city in continental Europe. The water supply, disposal of sewage, general street and house sanitation, hospitals and asylums and everything pertaining to public institutions were all remodeled and renovated

at his instigation and in many instances under his special supervision. Berlin, once an unhealthy, disease-breeding capital, is now a model of sanitary perfection and one of the healthiest of the great cities of the world. This transformation was due to the energy, skill and untiring perseverance of Virchow. His pupil, Ernest Wende, of Buffalo, for ten years pursued a similar course in this city with correspondingly proportionate results.

In paying tribute to his memory the *New York Tribune* of September 6, 1902, the day following Virchow's death, among other things said editorially:

In this event the world is greatly bereaved. It has lost one of the greatest intellects and one of the noblest characters of the age. It has lost one of the greatest benefactors of the human race, of this age and of all ages. Men have called Virchow the founder of modern medical science. That characterisation in the singular number may be extreme. At least he was one of its chief founders. He was second to no other, and we count upon the fingers of the hand the few who are worthy to be ranked with him. It was one of the chief glories of the glorious nineteenth century that it practically created the science of healing. To it belonged the epoch-making achievements of vaccination, anesthesia, bacteriology, cellular pathology and antisepsis. Under those five heads we must place nine-tenths of our pathology, prophylaxis and therapeutics and indeed of all medical and surgical science since Harvey. Of the authors of those five achievements one, the inventor of anesthesia, remains undetermined, or disputed. One, the illustrious apostle of antisepsis, still lives in honored and active age. One, who could claim with Pasteur the distinction of primus inter pares in that distinguished company, has just passed away.

The world is the poorer for the removal of so inspiring a personality. It is immeasurably the richer for the results of his works and researches, which cannot be removed from it; and those works were many and varied. We think of him first as the discoverer and demonstrator of cellular pathology, the principle which forms the cornerstone of medical science. That was his chief gift to the whole human race. But it is worthy of remembrance that he was, too, the statesman who organised the financial system of the Prussian Government. He was the municipal sanitarian who gave to Berlin its superb water supply and its unrivaled system of sewage disposal, and thus transformed one of the most unhealthful of European capitals into one of the most healthful. For thirteen years a leader in the imperial parliament, for forty years a leader in the Prussian parliament, and for more than forty-two years a dominant member of the municipal council of Berlin, he presented such an example of the man of thought and the man of affairs in one as the world has seldom seen. More nearly perhaps, than any

other man of the age he approximated to the distinction of universal genius. He was for two generations a universal benefactor of the race. His name will in all time be held in universal honor, affection and reverence.

How Wood Would Build the Canal.

AMERICAN enterprise and modern hygiene embodied in one person — General Wood — startled the world by demonstrating that tropical climate alone is powerless to cause tropical dysentery, cholera, typhoid fever, or yellow fever. This astounding fact seems to be the inevitable conclusion from watching the effect upon a perennial plague spot of enforced cleanliness. The whole world now knows the true relation to health of the climate of Cuba, and also has a better conception than ever before of the pathogenic possibilities of the filthy habits of the Cubans.

Our nation is likely to come again under the observation of the world in a conspicuous way when we build the transisthmian canal at Panama or elsewhere, as may be determined. In the discussions, in print and before congress, upon the possibility or desirability of this canal, the conclusion seems to have been universal that if the task was undertaken it would only be completed at an enormous loss of life to the workers from the diseases incident to the climate—those above mentioned; that white labor could not be employed in the work, or if employed it would be with the understanding of the enormous liability to disease of a high percentage of fatalities. But Wood's sanatory compaign in Cuba has demonstrated the exact reverse of this conclusion, and we have the absolute conviction that under his direction, or that of an equally efficient sanitarian,—if he can be found—the canal can be built from start to finish with immunity to the entire force from the so-called tropical diseases. Further, that the cost of the requisite sanatory equipment, including sanatory camps, hygienic water and food, inspection and maintenance, assuming that 1,000 men may be gathered in a single camp, will not exceed $10.00 a man a year.

By the term sanatory camp, we mean camps upon a site selected by the sanatory officer, with provision made for piping to all of its parts an abundant supply of pure water, with proper sewers in all its parts, and with a generous provision of concrete or other impervious covering for the more

exposed portions of its soil—to the end that in that camp men may live without infecting or fouling the soil, may eat clean food, drink clean water, and sleep undisturbed by disease-bearing insects. From such camps men would go to their daily tasks fit for their duties; in them tired men would find rest and refreshment from toil, and immunity from disease. Inspection should show that members of the expedition were sound at the beginning, and daily inspection of camps and men would help to preserve such soundness. What more impressive lesson to the world could be given of the value of modern sanitation than the object lesson of a sanatory outfit building the trans-isthmian canal in defiance of nature and of tropical climate without infection from tropical disease. And who is better fitted for this conspicuous task by training, knowledge and experience than our distinguished and honored confrère General Wood ?

"Doctor of Osteopathy."

WHATEVER we may think of the osteopaths from a professional viewpoint, there is at least one matter with which they are in accord with the medical profession, Mark Twain and the greater part of the church world, and that is their common sense view of the fad of Mother Eddyism in general and christian science in particular. There is a little pamphlet published in the interests of the osteopaths entitled, Osteopathic Success, which in a recent issue brands the seeress of the far east as a fraud and her belief as a fake.

An interesting feature—interesting to the medical mind—of the same issue is that portion devoted to clinic cases from the field, wherein are reported some of the cures of osteopathy by several active practitioners who have been decorated with the title and degree of D. O. Four cases will suffice. The first was a goitre on a man of 40.

His mother also had been suffering with a very large one. Assuring him that there was help for him in osteopathic treatment, I took the case, treating him twice a week, and at the expiration of two months the goitre was cured. The lesion consisted of an anterior condition of the fifth cervical vertebra, and a falling of the clavicle.

Here endeth the first lesson in etiology and pathology.

The second case was that of a man who was suddenly "taken

with a very weak and irregular beating of the heart. Osteopathic diagnosis revealed an enlarged condition of the liver and lesions in the pneumogastric nerve." Eight treatments cured the gentleman. Then along came the third wonder: a case of diabetes mellitus in which the characteristic symptoms are reported and where osteopathy shines like a shooting star, for a new appetite is discovered. This patient had an "erotic appetite." Osteopathy is entitled to and deserves all the credit for the discovery of this new symptom in diabetes. Anyway, in spite of his erotic appetite, this patient received nine treatments and went back to work. Twelve other treatments cured him. In this case the lesions "were found in the nerve centers of the liver and kidneys."

The fourth case does not give the location of the lesion; but the "patient was most efficiently helped over that critical period in which collapse seemed imminent and started on a new epoch of life with fifteen osteopathic treatments."

From these cases osteopathy appears to be a case of "D.O., D.O., my huckleberry, D.O."

The German courts have rendered a decision of great importance to the medical profession in the case of a Nuremberg physician who was arrested on a criminal charge for neglecting to notify the authorities of the death and mutilation of a newborn infant. The physician was called to attend a woman who was seriously ill. In his examination he discovered that she had recently given birth to a child and he found the mutilated remains of the infant in a vessel under the woman's bed. Apparently the child had been dead but a short time. He deemed it his duty to remain silent regarding the criminal aspects of the case and went on with the treatment of the woman just as though he had not discovered the child's body. In some way the facts became noised about and when the police made an investigation they learned the physician's connection with the case and his knowledge of the death of the infant and he was placed under arrest charged with what in this country would be equivalent to being an accessory. On trial he set up as his defence that he had acquired the knowledge of the alleged crime in his professional capacity; that had he not been in confidential relation with the mother as her physician, he would not have known of the existence of the child's body; that none but a physician could have known of the woman's condition and

then only could he receive the facts as a matter of professional confidence. The courts held that his position was correct and within the law; that to have made known his discovery would have been to violate the confidential relations existing between physician and patient, and he was discharged from custody after an honorable acquittal.

Dr. Sydney A. Dunham, of Buffalo, has secured the beautiful Dunham home of 1392 Amherst Street, which he will occupy as his private residence and keep open for the care and treatment of selected nervous patients. Dr. Dunham has been convinced for sometime of the great need in this vicinity for a strictly private home for certain forms of nervous disease. The environment and surroundings of the house chosen are of the country sort. It is surrounded by an acre and a half of land opposite the Park Meadow and is covered by native maple and oak trees.

Drug and alcoholic habitues are excluded. Patients may have the attendance of family physician while at the home.

All communications should be addressed to Dr. Sydney A. Dunham, office, 239 Delaware Avenue, Buffalo, N.Y.

PERSONAL.

Dr. V. M. Griswold, who some years ago removed from Fredonia, N. Y., to Westerly, Rhode Island, has returned to his former home and resumed his professional work at Fredonia.

Dr. Frederick Peterson, of New York, formerly of Buffalo, recently spent a few days in this city in company with his mother, Mme Peterson-Berg.

Brigadier General William H. Forwood, surgeon-general United States Army, having reached the statutory age, was retired September 7, 1902. Brigadier-General Robert M. O'Reilly assumed the duties of Surgeon-General, September 8, under an appointment made by The President several weeks ago.

Dr. Sydney A. Dunham, of Buffalo, announces the removal of his offices to 239 Delaware Avenue, second door above Chippewa Street. Hours: 1 to 4 and 7 to 8 p.m. Telephone, Tupper 262. *X*-Ray examinations.

Dr. J. M. O'Neill, of Buffalo, has removed from 536 Swan Street to 381 Swan Street. Hours: 8.30 to 9.30 a.m., 1.30 to 3 p.m., and 6.30 to 9 p.m. Telephone, Howard 212.

Dr. Maurice J. Lewi, of New York, announces that hereafter he will limit his practice to diseases of the foot. Office and residence, 149 W. 85th Street. Hours: 9 a.m. to 4 p.m. Telephone, Riverside 2059.

Dr. A. W. Bayliss, of Buffalo, who with Mrs. Bayliss, has been spending the summer in Europe, returned September 18, 1902, and resumed his professional work at 592 Spring Street.

Dr. Alice E. Rowe, of Springfield, Mass, has been appointed assistant physician at the Gowanda State Hospital for the Insane. She was graduated at the Boston University Medical School in 1893 and afterward spent a year in the Massachusetts Homeopathic Hospital. Dr. Rowe has made a special study of nervous diseases and spent four months of last year studying in the hospitals in Berlin and other places in Europe. She holds the state license to practise, and has passed the civil service examination.

Johannes Orth, professor of pathological anatomy in the University of Göttingen, succeeds the late Professor Virchow to the chair of pathological anatomy in the University of Berlin. Professor Orth was for many years Professor Virchow's assistant.

Dr. William H. Mansperger of Buffalo, has been appointed chief surgeon for the Erie Railway vice Dr. C. M. Daniels, deceased.

The following-named physicians who have been touring in Europe during the summer have returned and resumed their professional work: Drs. Max Breuer, Roswell Park, Allen A. Jones, Alexander McNeil Blair, Julius Pohlman.

OBITUARY.

Dr. Clayton M. Daniels, of Buffalo, died at his home, 315 Jersey Street, September 6, 1902, aged 48 years. It is believed by his intimate friends that he was infected through an operation

wound a long time ago, though he never mentioned the fact. At all events, he has been ill for many months, confined to his bed most of the time, with symptoms that would justify such a conclusion.

Clayton M. Daniels was born at Panama, N.Y., April 2, 1854. He was educated in the public schools of that village and was afterward graduated from the Jamestown High School. He then entered the college of medicine of the University of Buffalo, was graduated in 1880 and began the practice of medicine and surgery in Buffalo. His chief work for many years had been of a surgical nature, having early developed a preference in that direction, and he became a deft operator as well as a skilful surgeon.

At the time of his death Dr. Daniels was surgeon-in-chief of the Sisters of Charity and the Emergency Hospitals and had been for years back. He selected the site, and bought the lot for the new Emergency hospital and made the general draft of the plans for that building, in which he took great pride.

For four years Dr. Daniels was professor of anatomy in the medical college of Niagara University. He was also attending surgeon at Buffalo for the Erie, Nickel Plate, Western New York & Pennsylvania and Buffalo, Rochester & Pittsburg railroads.

He was a prominent Mason and that brotherhood conducted the funeral ceremonies on Monday afternoon, September 8, according to the ritual for the burial of the dead of that order, the interment being at Forest Lawn Cemetery.

Dr. Daniels married Elva T. Ellis twenty-seven years ago. He is survived by the widow and by one daughter, Laura E. Daniels.

Dr. Eugene Edward Storck, of Buffalo, died at his residence, 225 East Utica Street, September 9, 1902, aged 47 years. Although his death was due to pulmonary tuberculosis from which he had been ill for some months, the news thereof, nevertheless, came as a sudden shock to all save his very immediate friends.

Dr. Storck received his early educational training in the public and high schools of Buffalo and took his medical degree in 1878 from Buffalo University Medical College.

Dr. Storck belonged to a family of physicians, his father, Dr. Edward Storck, having been a prominent practitioner in

Buffalo for forty years and his son, Edward, 2d, is now a member of the senior class of the medical department, University of Buffalo, having received two years training at Cornell University. In the twenty-four years of his professional career the deceased had acquired a large clientèle, who became his attached friends and to whom his loss is a personal one.

He is survived by a widow, one son, Edward, and a daughter, Eugenia. The funeral was largely attended from the family home, September 12, 1902.

SOCIETY MEETINGS.

The American Association of Obstetricians and Gynecologists held its fifteenth annual meeting at Washington, D. C., September 16, 17, and 18, 1902. The Raleigh, which was the headquarters and in which the meeting was held, proved one of the most delightful of hostelries. To the already long list of interesting and instructive sessions held by the Association this one must be added, and among which it readily takes front rank. The weather was everything that could be desired—pleasant but not hot—and the attendance of Fellows was large and enthusiastic.

The scientific work of the association was well up to its high standard and the discussions, as usual, were crisp and animated. General George M. Sternberg, surgeon-general U. S. army (retired) delivered an address of welcome, to which President Ricketts made appropriate response; then followed the reading of papers and debates thereon, which continued during the next three days.

A reception was tendered President Ricketts on Tuesday evening by Dr. I. S. Stone, of Washington, to which the Fellows of the Association and their guests were invited, and which was enjoyed greatly by all present.

On the evening of Wednesday, the second day, the annual dinner was served in the lower banquet room of the Raleigh Hotel, at which upwards of fifty covers were laid. The decorations, music and service were of the very best. Several guests from New York and other cities attended the dinner as well as the scientific sessions, among whom were two from S. Paulo, Brazil, in the persons of Dr. Horace M. Lane and Dr. Guilherme Ellis. Among the guests from New York were Drs. Frank P.

Foster, editor of the *New York Medical Journal*, Dr. I. N. Love, editor of the *Medical Mirror*, Dr. B. T. Whitmore and William James Evans, Esq. From other cities came Dr. O. M. Willis, Marietta, and Dr. B. F. Beebe, Cincinnati, O.; Dr. R. G. Miles, New Castle, Pa.; Dr. E. E. Guenther, Newark, N. J.; Drs. Wm. A. Rolfe and H. H. Hartung, of Boston; Dr. Charles E. Congdon, Buffalo; Dr. Floyd J. Gregory, Keysville, Va.; Dr. Thomas J. McGuire, Parkersburg, W. Va.; Dr. Joseph A. Mudd, Hyattsville, Md., with a large attendance of the Washington profession, including Drs. Joseph Taber Johnson, J. Wesley Bovee, Isaac S. Stone, Thomas E. McArdle and others.

The officers elected for the ensuing year are as follows: president, L. H. Dunning, Indianapolis; vice-presidents, M. Rosenwasser, Cleveland and H. E. Hayd, Buffalo; secretary, William Warren Potter, Buffalo; treasurer, X. O. Werder, Pittsburg. Executive council: Edward Joseph Ill, Newark; William Henry Humiston, Cleveland; Edwin Ricketts, Cincinnati; Walter B. Chase, New York; A. Vander Veer, Albany, and L. S. McMurtry, Louisville. The next meeting will be held at Chicago, beginning the last Tuesday in September, 1903.

The Roswell Park Medical Club has elected officers for the ensuing year as follows: president, Dr. Julius H. Potter; vice-president, Dr. William Meisberger; secretary and treasurer, Dr. George F. Cott.

The Medical Society of the State of New York will hold its ninety-seventh annual meeting at Albany, January 27, 28 and 29, 1903. The president, Dr. Henry Reed Hopkins, of Buffalo, has appointed the following-named business committee: Dr. Ernest Wende, chairman, 471 Delaware Avenue, Buffalo; Dr. Hamilton D. Wey, Elmira, and Dr. J. Mongtomery Mosher, Albany. This committee will have charge of the program and all communications relating thereto should be addressed to one of the members.

The Tri-State Medical Society of Alabama, Georgia and Tennessee will hold its fourteenth annual meeting at Birmingham, Ala., Tuesday, Wednesday and Thursday, October 7, 8 and 9, 1902, under the presidency of Dr. J. C. LeGrand, of Birmingham. A most interesting program has been prepared.

THE Buffalo Academy of Medicine held meetings during the month of September as follows:

Section on Surgery.—Tuesday evening, September 2. Program: Tic douloureux and its surgical treatment, Wm. C. Phelps. Presentation of case by Marcel Hartwig; discussion by W. C. Krauss and others.

Section on Medicine.—Tuesday evening, September 9. Program: Syphilis of nervous system, Floyd S. Crego. Cerebral hemorrhage following injury to the spine, Sydney A. Dunham.

Section on Pathology.—Tuesday evening, September 16. Program: On the nature and germicidal action of the organic peroxides, F. G. Novy, Professor of Hygiene, University of Michigan, Ann Arbor, Mich. Statistics of movable kidney with special reference to nervous symptoms, A. L. Benedict.

Section on Obstetrics and Gynecology.—Tuesday evening, September 23. Program: Movable kidney; frequency, method of diagnosis and treatment, A. L. Benedict. Report of cases, (*a*) Tetanus following delivery; (*b*) Rupture of the uterus, Irving W. Potter.

Section on Ophthalmology, Otology and Laryngology.—Tuesday evening, September 30. Program: Adenoids, Carl Leo-Wolf, Niagara Falls. Some of the more common forms of ocular syphilis, Arthur G. Bennett. Presentation of cases of sinus thrombosis, Geo. A. Sloan. Radical antral operation, and partial extirpation of the larynx. Exhibition of patients, Geo. F. Cott.

COLLEGE AND HOSPITAL NOTES.

THE Cincinnati College of Medicine and Surgery has closed its doors, for lack of sufficient support. This would appear to be the direct result of the requirement on the part of the state of higher standards for entrance upon the study of medicine. Following the lead of New York many states, Ohio included, have established a rigid system of entrance examinations, and others are year by year adopting similar measures. The effect of this will be to strengthen the strong colleges and weaken the weak

ones, until finally, let it be hoped, there will be uniformity of standards throughout the United States.

THE Medical department of the University of Buffalo began its fifty-seventh annual session September 29, 1902, to continue thirty-two weeks. The opening lecture was delivered by Dr. Lucien Howe, professor of ophthalmology. The number in attendance was large, and the university is in a prosperous condition.

THE consulting staff of the Emergency Hospital for the ensuing year has been appointed as follows: president, Dr. John H. Pryor; vice-president, Dr. Wm. C. Krauss; secretary, Dr. Vertner Kenerson.

THE Buffalo Clinical Laboratory has been organised to meet the demands for clinical work at rates within the means of all classes, equipping one centrally located laboratory where a small staff of workers can carry on clinical examinations for a large number of physicians. By this means busy doctors have the advantages of reliable clinical analysis of blood, urine, and the like, and prompt reports. For the convenience of patrons the laboratory will maintain a messenger service and will send for urine and other clinical material to any place within the city limits without extra charge.

An institution of this sort demands a considerable initial expenditure in order to get ready for work. It is proposed to raise a capital of $5,000 for the equipment of the laboratory and purchase of supplies. The sum is divided into 500 shares of $10 each. When the requisite number of shares have been paid into the treasury, the laboratory will be incorporated under the laws of New York, thus acquiring the legal standing and permanency that are desirable in order to do business on a good business basis. It will then be ready to begin work.

Physicians are appealed to personally to assist in this most desirable enterprise by subscribing for as many shares as each may choose, and it is further urged that subscriptions be made as promptly as possible, in order that there may be no delay in opening the laboratory and beginning the work. Subscriptions or enquiries may be addressed to any of the officers who are as follows: president, J. H. Potter; secretary, A. L. Benedict; treasurer, H. C. Rooth; director, Franklin W. Barrows; assistant director, William Irving Thornton.

BOOK REVIEWS.

THE THEORY AND PRACTICE OF INFANT FEEDING. With Notes on Development. By HENRY DWIGHT CHAPIN, A. M., M. D., Professor of Diseases of Children at the New York Post-Graduate Medical School and Hospital, etc. Octavo, pp. 335. Illustrated. New York: William Wood & Company. 1902. [Price, $2.25 net.]

The plan which Dr. Chapin has pursued in this work on infant feeding has been not simply to give various formulæ with indications for their use, but to set forth the principles which underlie the successful feeding of infants leaving the physician for the most part to apply these for himself. The book is divided into four parts. In the first, the digestive systems, foods, and processes of digestion in the common domestic animals—dogs, horse and cow—are compared, and the adaptation of the digestive tract of each to the food of the animal is shown. Analyses of the milk of each species are given together with its manner of coagulation, and attention is called to the resemblance which exists between the food of the adult and the young animal of each class and the bearing this has upon the development of the digestive class.

Part II. takes up the subject of raw food materials. The first chapter is occupied with analyses of cow's milk, the variations to which it is subject, the nature of the proteids, cream, gravity and centrifugal, and analyses of condensed milk. Then follows a chapter on the bacteriology of milk which is supplemented by a concise and practical chapter on the bacteriological examination of milk by Prof. Conn, of Wesleyan University. This, as well as the chapter on the quantitative analysis of milk is complete enough in the methods given to be of value and yet not so complex as to be beyond the skill of an ordinarily intelligent person. The preservation of milk, the character of market milk and certified milk complete the topics here considered.

Part III. is devoted to infant feeding proper. Breast feeding is briefly considered. The burden of Dr. Chapin's argument in regard to infant feeding is in substance this: "It must be clearly borne in mind that the nutrition and development of the digestive tract must be considered together. Little progress will be made if only a calculation of the composition of food is made."

This section is an admirable one. Many methods for modifying milk with anything like accuracy are so complex as to be disheartening. The method here presented is simplicity itself. As diluents, Dr. Chapin prefers the cereal waters, both because of their effect on the curd and because of the nourishment they add to the mixture.

The concluding section of the book is devoted to the growth and development of the normal infant which by comparison

affords the best test of successful artificial feeding. For this part of the work 200 carefully selected healthy infants, ranging in age from a few hours to two years, were examined by the anthropologist, Dr. Hedlicka. The tables prepared from his measurements should be of much value to the pediatrist.

This work places the subject of infant feeding on a broader, more scientific basis than any of its predecessors have done. If some of its statements cannot yet be regarded as final, they are rational and the book, as a whole, is eminently satisfactory.

The mechanical part is worthy of mention for its excellence.

M. J. F.

THE PERVERTS. By WILLIAM LEE HOWARD, M. D. Duodecimo, pp. 388. New York: G. W. Dillingham Co. 1902. [Price, $1.50.]

Here is a queer book; a book with an insight into life—the life of the underworld; and, although Dr. Howard has endeavored to clothe a scientific subject in a narrative gown, trimmed with anecdote and jeweled with the events of life in the slums, he has made neither a valuable scientific work, nor a brilliant novel. The elements of each are all there. A professional novelist would take the material in The Perverts and make of it one of the most amazing stories of modern times and all he would have to do would be to edit the present work as it stands. Dr. Howard has seen life in the slums as it really exists and he faithfully portrays it; yet it must be acknowledged that in some parts of the book there is an apparent weakness of construction—one might almost be tempted to say amateurish.

But the story, as a whole, is strong; its plot is well sustained, and there are times when one could easily imagine he were reading the pen picture of some one of the really great masters of modern realism. The descriptive character work is exquisitely real and in places there are startling pictures of life in the slums of New York with a cheap, room-rent, prostitute as the central character—a woman whose better self had not been entirely strangled by the life she led; a woman who, in spite of snuffchewing, cheap and spasmodic drunks and a cog-wheel life has not lost her respect for decency; in fact, just such a woman as one who has seen anything of slum life will recognise. For this reason, if for no other, the book is heartily recommended to the professional reformers of the better world; to the bands of well-meaning and respectable women workers in the cause of a higher christianity who do rescue work, serve on committees for the reclamation of lost and loosened souls, and wonder at the utter depravity of lost womanhood which sneers at tracts, rails at beef-stew suppers with ecclesiastic trimmings, turns in illy-disguised disgust from protestations of friendship and sisterhood which are offered from across the street, and repels half-hearted advances because she knows they are not sincere. It will show them that there is good in a fallen woman; it will show them that a woman, whose sin is in many cases

the sin of necessity, wears a jewel which is rare even in highly respected, if not wholly respectable circles, where the sin of the outcast is the pastime of the saint—a jewel which a doctor will invariably find in the slums—gratitude. Those who expect to find in The Perverts a series of stories of warped sexual instinct, something after the fashion of Krafft-Ebbing's much sought after work of art, will be disappointed. There isn't a thing nasty in it from cover to cover. It is a clean book. The story concerns a family of perverts, one of whom, a doctor, is an alcoholic. His sisters are other types and they are all splendidly pictured and admirably described. Told in narrative form the story is interesting—especially so to the scientific mind. It is intensely dramatic in places and the descriptive work is of such a character that Dr. Howard should write a novel without any science in it. He has the true novelist's faculty for painting pen pictures of a most charming type. By all means read The Perverts. You will be the better for it—it will teach you something. N.W.W.

THE OPERATIONS OF SURGERY. By W. H. A. JACOBSON, M. Ch., Oxon, F. R. C. S., Surgeon to Guy's Hospital; Consulting Surgeon, Royal Hospital for Children and Women; Member Court of Examiners, Royal College of Surgeons, etc; and F. J. STEWART, M. S., London, F. R. C. S., Assistant Surgeon, Guy's Hospital and to the Hospital for Sick Children; Surgeon in-Charge of the Throat Department, Guy's Hospital. Fourth edition, revised, enlarged, and improved. Five hundred and fifty illustrations. Two volumes. Volume I: Operations on the Upper Extremity, Operations on the Head and Neck, Operations on the Thorax. Volume II: Operations on the Abdomen, Operations on the Lower Extremity, Operations on the Vertebral Column. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, cloth, $10.00; sheep, $12.00 net.]

This author is no stranger to the medical profession of this country. He has long been recognised as one of the leading surgeons of Great Britain and his "Operations of Surgery" took appropriate place when the book first appeared, now some fifteen years ago, among the best modern surgical treatises. Each succeeding edition has only further accentuated the fact that the author is a thoroughly conscientious exponent of the most modern principles of surgical art and science. He writes clearly, though concisely, and uses scarcely a superfluous word, thereby making his treatise the more readable and the easier to be remembered.

Beginning with the preface we desire to invite attention to it as a model. The author tells first when each of the three preceding editions of his book appeared—an item of time-saving assistance. We have spent valuable time on many occasions in search of the information contained in the first two lines of this preface, a piece of intelligence that most authors of late seem inclined to hide. Moreover, the entire preface conveys the precise information that every one interested desires, and especially a reviewer.

Mr. Jacobson has been slow to put forth this edition for the reason, among others, that he finds it increasingly difficult as time goes on, to make it express the surgical conditions of today, each result being disappointing in that regard. No doubt this is the experience of most authors with new editions, but especially so in the surgical field. Nevertheless, he has given us a surprisingly up-to-date work, and has spared no pains in time or labor, has omitted no reference or illustration that would add to the usefulness of his book. The increase in the number of engravings has been very large and the author has given this part of the work personal attention. Its importance cannot be overestimated; good illustrations make the text clearer, poor ones only obscure it.

It should be borne in mind that this work is intended particularly "for the use of those recently appointed on a hospital staff, and for those preparing for the higher examinations." These are the author's own words and form a part of the title page, and Jacobson emphasises this point with some fervor in his preface. We take pleasure in adding that it is a splendid work for the general practitioner of medicine residing where he must needs do much surgery. Furthermore, it is a treatise that no teacher of surgery and no one who practises surgery exclusively can afford to neglect or go without. In two volumes it is a handsome, useful, and necessary addition to the surgeon's library.

THE NEUROSES OF THE GENITOURINARY SYSTEM IN THE MALE, WITH STERILITY AND IMPOTENCE. By DR. R. ULTZMANN, Professor of Genitourinary Diseases in the University of Vienna. Second edition. Revised, with notes and a supplementary article on Nervous Impotence, by the translator, Gardner W. Allen, M. D., Surgeon in the Genitourinary Department of the Boston Dispensary, Instructor in Genitourinary Surgery in Tuft's Medical College. Illustrated. 12mo, 198 pages. Philadelphia: F. B. Davis Company. 1902. [Price, $1.00 net.]

It speaks well for the genius of Ultzmann that although it is years since he wrote the monographs, which in the main make up this book, little of any value has been added to the subject, so great was his knowledge and so comprehensive his grasp of the details of diagnosis and treatment. True, there have been advances made in matters relating to sexual disorders, but they in no wise trespass on the ground Ultzmann originally covered; they merely add to the field of study. These monographs were translated by Dr. Allen and to them he has added notes which bring the whole subject-matter down to the present time, and make the book one of the most complete of its kind in the world. A broad statement maybe, for in these days of progress in all branches of medicine and surgery most excellent works are constantly being produced, yet the fact remains that as yet no one has improved on Ultzmann's work. None but genitourinary men could attempt it with any degree or hope of success,

and Ultzmann left little but stubble in the field for them to harvest.

The introduction makes plain the connection between nervous affections of the urinary system and similar affections of the genital organs and shows clearly how they may be so interwoven one with the other that grave consequences may ensue. There is a brief and clear statement of facts concerning neuroses in general, confined, of course, to the limitations of the book, and then taken up in regular order comes a study of the urine in genitourinary neuroses. The sensory, motor and secretory neuroses of the urinary and sexual systems are considered separately. Sterility, impotence and nervous impotence are all gone into very thoroughly when the size of the volume is considered. Dr. Allen's additions to the text and his notes add to the value of the book as a work of assistance to the practitioner; and best of all the book is small, compact, precise and not overburdened with pictures or unnecessary "I's."

N.W.W.

A Manual of Surgical Treatment. By W. Watson Cheyne, M. B., F. R. C. S., F. R. S., Professor of Surgery in King's College, London; Surgeon to King's College Hospital, etc.; and F. F. Burghard, M. D. and M. S. (Lond.), F. R. C. S., Teacher of Practical Surgery in King's College, London; Surgeon to King's College Hospital, etc. In seven imperial 8vo volumes, with illustrations. Volume VI., 498 pages with 124 illustrations. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $5.00 net.]

This was to have been the last of this very excellent work, but the authors announce that they have been compelled to make the volume into two sections, the first of which has now been issued, the second to follow "in a few months." The reason for this is that to have crowded all the material into one volume would have made too bulky a book and would have, too, delayed publication much longer. As in previous volumes, which have been reviewed at length, the illustrations are worthy of especial attention. They are admirably made and splendidly presented; in such a manner as to really be of some use other than as mere pictures to make good the page in the index which is given up to "illustrations."

In this volume the surgical affections of the tongue and floor of the mouth are considered at length and in the same clear cut style and with the same careful attention to detail and explanation which has characterised the previous literary work of the joint authors. Then follows in regular order the surgical affections of the pharynx, esophagus and neck; the surgical affections of the abdomen. This last section is given most careful consideration and detailed description. The division includes affections of the abdominal wall; methods of examination of the stomach: injuries of the stomach and gastrostomy; gastric ulcer; cancer of the stomach; injuries of the omentum, mesentery and intestines; acute intestinal obstruction; intussusception; chronic intestinal obstruction; inflammatory affections of the

intestines; peritonitis; hernia; fecal fistula and artificial anus. Much space and many illustrations are given to hernia and appendicitis and the book, on the whole, is well up to the standard which the authors set for themselves when they gave the first volume to the public. N.W.W.

A Practical Manual of Bacteriology for Students and Physicians By A. C. Abbott, M. D., Professor of Hygiene, University of Pennsylvania. New (6th) edition, revised and enlarged. In one 12mo volume of 636 pages, with 111 illustrations, 26 colored. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $2.75 net.]

The remarkable growth in bacteriological research, especially within the last few years, has rendered it necessary to recast much of the literature on the subject. The popularity of Abbott's work began with its first issue in 1891 and has steadily increased during the five editions that appeared within eight years. It is now three years since the fifth edition was sent out and during that time bacteriology has advanced materially in several directions. Some of the important of these are that new light has been shed upon the etiology of epidemic cerebro-spinal meningitis and dysentery. The study of tuberculosis, too, has become of vast interest, leading to the discovery of a new group of microörganisms closely allied to the bacillus tuberculosis and apparently having the property of causing conditions quite suggestive of tubercular disease. In short, there is much advance in our knowledge of the mechanism of infection and immunity.

In this edition Abbott has brought forward the study to embrace the immediate present. The book has become standard as a working guide with student and teacher and is yet without a rival in the field it essays to occupy.

The Practical Medicine Series of Year Books. Ten volumes. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume V. Obstetrics. Edited by Reuben Peterson, A. B., M. D., Professor of Obstetrics and Gynecology in the University of Michigan; and Henry F. Lewis, A. B., M. D., Instructor in Obstetrics and Gynecology in Rush Medical College. Duodecimo, pp. 223. Illustrated. Chicago: The Year Book Publishers. 1902. [Price of this volume, $1.25; entire set, $7.50.]

This book is one of the most systematic, as well as one of the best of the series thus far issued. It sets forth the principal writings of the year pertaining to obstetrics. The topics have been judiciously arranged and the selections have been well made.

Considerable literature on obstetrical subjects has been published of late showing a swaying of the pendulum of medical science on and toward that important branch. Probably as much advancement has taken place within the last lustrum or two in the department of obstetrics as in any branch of medicine, if we judge by the life-saving results. Nowadays we do

not hear of "child-bed fever," and seldom even of puerperal eclampsia, while death from postpartum hemorrhage is almost unknown; and these constitute the principal sources of danger during the puerperium.

There is considerable information to be derived in this book on all the essentials relating to the care of the puerperal woman, and the management of labor. It is not only one of the most important books of the practical medicine series, as we stated at the outset, but it is decidedly the best small work of the year for the general practitioner of medicine.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Larngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VI. General Medicine. Edited by FRANK BILLINGS, M. S., M. D., Head of Medical Department and Dean of the Faculty of Rush Medical College, Chicago. With the Collaboration of S. C. Stanton, M. D. 12mo, pp. 271. Chicago: The Year Book Publishers. 1902. [Price, $1.50.; entire series, $7.50.]

This volume deals with subjects of interest to every practitioner of internal medicine. Beginning with typhoid fever it takes up in regular order of sequence malaria and other tropical fevers and endemic diseases; the diseases of the liver, of the pancreas, of the esophagus, of the stomach, of the intestines, and, finally, parasitic diseases. The abstracts cover a vast amount of literature, they are very full and do not, as is too often the case, abridge the views of the authors who are quoted. The journals of late have been replete with gastrointestinal material and all of value has been utilised in this book. It is a credit to the distinguished editor of this volume, as well as to the editor-in-chief of the series, and will be accepted by all who are interested in its subject matter, as one of the best year-books in general medicine that has recently appeared.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Fourteenth Annual Meeting held at Richmond, Va., November 12, 13 and 14, 1901. W. D. Haggard, M. D., Secretary. Published by the Association. 1902.

We have had frequent occasion to mention the excellent work of this model society, as exemplified by the volume of transactions which it puts forth year by year. The present book is no exception to the custom of the association; indeed, in some respects, it may take rank as at least one of its very best publications. Primarily, the place of meeting—Richmond—contributed in a very large degree to the interest in, success of, and large attendance upon this annual session. No individual, no society ever goes to Richmond, but desires to go again. The people of that historic city receive its guests, as the Hon. Mr. Hunton said in his address of welcome, with open arms whether they come from east or west, north or south. Not only

this, but their hearts are large and their latch-strings work easily.

This book, from title to index, is full of interest and is a credit to the society and especially to its accomplished secretary. The meeting this autumn will be held at Cincinnati, under the presidency of Dr. W. E. B. Davis, who organised the association, and to whose energy and executive ability are due its present strength and efficiency.

TWENTY-FIRST ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF NEW YORK. For the year ending December 31, 1900 Transmitted to the legislature February 18, 1901. With maps. Albany: James B. Lyon, State Printer. 1901.

Upon attaining its majority the state board of health disappears and is replaced by the state commissioner of health. This, therefore, will be the last report of the board as such, but in the succeeding years, the commissioner will present the annual report of the department of health. The president of the retiring board became the commissioner, so the previous efficiency of the department will be maintained under the administration of Dr. Daniel Lewis.

This report follows the line of preceding years in presenting first a summary of the work done, signed by the board; next the sanitary status of the several important localities, pointing out epidemic diseases and the action of the board to abate them; and, finally, an appendix volume containing maps of villages and towns where public improvements, sewers, etc., have been authorised. It is a report of interest to the localities affected by the board's action, as well as to sanitarians in general.

THE MEDICAL TREATMENT OF GALLSTONES. By J. H. KEAY, M. A., M. D. Duodecimo, pp. 133. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $1.25]

It is coming to be the general belief among well-informed medical men that a person suffering from gallstones at once falls under the domain of surgery. In this belief we most heartily concur, notwithstanding very many strong statements in this little brochure that tend to support the medical treatment of gallstone disease. The author presents the subject in a very fair light, and we commend the book to everyone interested in the study of biliary calculi and the disturbances they engender.

MOTHER AND CHILD. By EDWARD F. DAVIS, A. M., M. D., Professor of Obstetrics in the Jefferson Medical College; Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic. Duodecimo, pp. 264. Philadelphia: J. B. Lippincott Co. 1902. [$1.50.]

A book for the mother, with chapters on her care during pregnancy, parturition and the lying-in, and the care of the

infant and young child. The author does not attempt to teach the mother too much, but gives only such advice as the intelligent mother will be able to profit by. M.J.F.

BOOKS RECEIVED.

Saunders's Question Compends. Essentials of Histology. By Louis Leroy, B. S., M. D., Professor of Histology and Pathology, Vanderbilt University, Medical and Dental Departments; Pathologist to the Nashville City Hospital, etc. Second edition, thoroughly revised and greatly enlarged. 16mo volume of 263 pages, with 92 beautiful illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $1.00 net.]

Saunders's Question Compends. Essentials of Diseases of the Ear. By E. B. Gleason, S. B., M. D., Clinical Professor of Otology, Medico-Chirurgical College, Philadelphia; Surgeon in charge of the Nose, Throat and Ear Department of the Northern Dispensary, Philadelphia, etc. Third edition, thoroughly revised. 16mo volume of 214 pages, with 114 illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $1.00 net.]

Practical Diagnosis. The Use of Symptoms and Physical Signs in the Diagnosis of Disease. By Hobart Amory Hare, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; Author of a Textbook of Practical Therapeutics. Fifth edition, revised and enlarged. Octavo, pp. 710. Illustrated. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $5.00 net.]

General Paresis, Practical and Clinical. By Robert Howland Chase, A. M., M. D., Physician-in-Chief, Friends Asylum for the Insane, Philadelphia; Late Resident Physician, State Hospital, Norristown, Pa. Duodecimo, 290 pages. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $1.75 net.]

The Practical Medicine Series of Year Books. Comprising ten volumes on the year's Progress in Medicine and Surgery. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume IX. Physiology, Pathology, Bacteriology, Anatomy. Pathology edited by W. A. Evans, M. S., M. D., Professor of Pathology College of Physicians and Surgeons, Chicago. Bacteriology, edited by Adolph Gehrman, M. D., Professor of Bacteriology, College of Physicians and Surgeons, Chicago. Chicago: The Year Book Publishers. 1902. [Price, $1.25; entire series, $7.50]

A Treatise on Diseases of the Anus, Rectum and Pelvic Colon. By James P. Tuttle, A. M., M. D., Professor of Rectal Surgery in the New York Polyclinic Medical School and Hospital. Octavo, pp. 980. Illustrated. New York: D. Appleton & Co. 1902. [Price, cloth, $6.00; half-leather, $6.50.]

The Diseases of Infancy and Childhood. For the Use of Students and Practitioners of Medicine. By L. Emmett Holt, M. D., LL. D., Professor of Diseases of Children in the College of Physicians and Surgeons (Columbia University), New York; attending Physician to the Babies' and Foundling Hospitals, Octavo, pp. 1178. Illustrated. Second edition, revised and enlarged. New York: D. Appleton & Co. 1902. [Price, cloth, $6.00; half-leather, $6.50.]

The Diseases of Infancy and Childhood Designed for the use of Students and Practitioners of Medicine. By Henry Koplik, M. D., Attending Physician to Mt. Sinai Hospital, New York. Octavo, pp. 675. Illustrated with 169 engravings and 30 plates in color and monochrome. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $5.00 net.]

Blakiston's Quiz Compends. Compend of Special Pathology. By Alfred Edward Thayer, M. D., Assistant Instructor in Gross Pathology, Cornell Medical College; Pathologist to the City Hospital, New York. Duodecimo, pp 322. Illustrated. Philadelphia. P. Blakiston's Son & Co. 1902. [Price, 80 cents net.]

Diseases of the Rectum and Anus. Designed for Students and Practitioners of Medicine. By Samuel Goodwin Gant, M. D., LL. D., Professor of Rectal and Anal Surgery at the New York Post-Graduate Medical School and Hospital; formerly Professor of Gastrointestinal Surgery at the University and Woman's Medical Colleges, Kansas City, Mo.; Attending Surgeon for Rectal and Anal Diseases to the New York Post-Graduate Hospital, St. Mark's Hospital, Hebrew Sheltering Guardian Orphan Asylum and New York Infant Asylum, etc. Second edition, rewritten and enlarged with 37 full-page plates, 20 of which are in colors and 212 smaller engravings and half-tones. Pages xxiv.-687. Royal octavo. Philadelphia: F. A. Davis Company. 1902. [Extra cloth, $5.00 net; sheep or half-Russia, $6.00 net, delivered.]

A Treatise on the Principles and Practice of Gynecology. By E. C. Dudley, A. M., M. D., Professor of Gynecology in the Northwestern University Medical School, Chicago. New (3d) edition, enlarged and thoroughly revised. In one very handsome octavo volume of 756 pages, with 474 engravings, of which 60 are in colors and 22 colored plates. Philadelphia and New York: Lea Brothers & Co. 1902. [Cloth, $5.00 net; leather, $6.00 net; half morocco, $6.50 net.]

Diseases of the Stomach. Their Special Pathology, Diagnosis and Treatment, with sections on Anatomy, Physiology, Chemical and Microscopical Examination of Stomach Contents, Dietetics, Surgery of the Stomach, etc. By John C. Hemmeter, M. D., Philos. D., Professor in the Medical Department of the University of Maryland, Baltimore, etc. Third revised and enlarged edition. Octavo, pp. 883. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $6.00 net.]

Transactions of the American Dermatological Association. Twenty-fifth Annual Meeting held at Chicago, May 30 and 31 and June 1, 1901. Frank Hugh Montgomery, M. D., Secretary. New York: Rooney & Otten Printing Co. 1902.

The International Textbook of Surgery. In two volumes. By American and British Authors. Edited by J. Collins Warren, M. D., LL. D., F. R. C. S. (Hon.), Professor of Surgery, Harvard Medical School; and A. Pearce Gould, M. S., F. R. C. S., of London, England. Second edition, thoroughly revised and enlarged. Vol. I. General and Operative Surgery. Royal octavo of 965 pages, with 461 illustrations and 9 full-paged colored lithographic plates. Vol II. Special or Regional Surgery. Royal octavo of 1,122 pages, with 499 illustrations, and 8 full-paged colored lithographic plates. Philadelphia and London: W. B Saunders & Co. 1902. [Cloth, $5.00 net; sheep or half-morocco, $6.00 net.]

The Treatment of Fractures. By Chas. L. Scudder, M. D., Assistant in Clinical and Operative Surgery, Harvard Medical School. Third edition, revised and enlarged. Octavo, 480 pages, with 645 original illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Polished buckram, $4.50 net; half-morocco, $5.50 net.]

A Textbook of Materia Medica, Therapeutics and Pharmacology. By George F. Butler, Ph. G., M. D., Professor of Materia Medica and Therapeutics in the College of Physicians and Surgeons, Chicago, Medical Department of the University of Illinois, etc. Fourth edition, thoroughly revised. Handsome octavo volume of 896 pages, illustrated. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $4.00 net; sheep or half-morocco, $5.00 net.]

A Textbook of the Surgical Principles and Surgical Diseases of the Face, Mouth and Jaws. For Dental Students. By H. Horace Grant, A. M., M. D., Professor of Surgery and of Clinical Surgery, Hospital College of Medicine; Professor of Oral Surgery, Louisville College of Dentistry, Louisville. Octavo volume of 231 pages, with 68 illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $2.50 net.]

Saunders's Medical Hand-Atlases. Atlas and Epitomé of Traumatic Fractures and Dislocations. By Professor Dr. H. Helferich, Professor of Surgery at the Royal University, Greifswald, Prussia. Edited, with additions, by Joseph C. Bloodgood, M. D., Associate in Surgery, Johns Hopkins University, Baltimore.

From the fifth revised and enlarged German edition. With 216 colored illustrations on 64 lithographic plates, 190 text-cuts, and 353 pages of text. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $3.00 net.]

Practical Obstetrics. A Textbook for Practitioners and Students. By Edward Reynolds, M. D., Visiting Surgeon to the Free Hospital for Women; and Franklin S. Newell, M. D., Assistant in Obstetrics and Gynecology in Harvard University. Octavo, pp. 553. Illustrated with 252 engravings and three colored plates. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, $3.75]

Handbook of Physiology. Revised by William H. Rockwell, Jr., M. D., and Charles L. Dana, A. M., M. D., Professor of Diseases of the Nervous System, Cornell University Medical College, New York; Physician to Bellevue Hospital. Octavo, pp. 865. Seventeenth American edition. With upwards of 500 illustrations, many in colors. New York: William Wood & Co. 1902. [Price, $3.co net.]

The Practical Medicine Series of Year Books. Ten volumes. Issued monthly, under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume X. Skin and Veneral Diseases, Nervous and Mental Diseases. Edited by W. L Baum, M. D., Hugh S. Patrick, M. D. Duodecimo, pp. 245. Chicago: The Year Book Publishers. 1902. [Price, $1.25; entire series, $7.50.]

Transactions of the Medical Society of the State of New York. Ninety-sixth Annual Meeting held at Albany, January 28, 29 and 30, 1902. Frederic C. Curtis, M. D., Secretary. Published by the Society. 1902.

Progressive Medicine. Volume III, September, 1902. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Philadelphia and New York: Lea Brothers & Co. [Per annum, in four cloth-bound volumes, $10.00. Per volume, $2 50, by express prepaid to any address.]

Physical Diagnosis. Diseases of the Thoracic and Abdominal Organs. A Manual for Students and Physicians. By Egbert LeFevre, M. D., Professor of Clinical Medicine and Associate Professor of Therapeutics in the University and Bellevue Hospital Medical College. Illustrated Philadelphia: Lea Brothers & Co. 1902.

A Textbook of Histology and Microscopic Anatomy of the Human Body. Including Microscopic Technique. By Dr. Ladislaus Szymonowicz, A. O., Professor of Histology and Embryology in the University of Lemberg. Translated and edited by John Bruce MacCallum, M. D., Johns Hopkins University, Baltimore. Octavo, pp. 435. Illustrated with 277 engravings, including 57 plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $4.75 net.]

Lea's Series of Pocket Textbooks. Materia Medica, Therapeutics, Medical Pharmacy, Prescription Writing and Medical Latin. A Manual for Students and Practitioners. By William Schleif, Ph. G., M. D., Instructor in Pharmacy, University of Pennsylvania. Series edited by Bern B. Gallaudet, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, New York. Duodecimo, pp. 389 Second edition, revised and enlarged. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $1.75.]

MISCELLANY.

The Maltine Company announces that 280 essays on "Preventive Medicine" have been entered in competition for the two cash prizes — $1,000 and $500, respectively — which that firm

offered last February. These essays are now in the hands of the three judges, Dr. Daniel Lewis, of New York, Dr. Chas. A. L. Reed, of Cincinnati, and Dr. John Edwin Rhodes, of Chicago, and their decision is awaited with great interest by the medical profession.

Four Hundred Dollar Prize.—Dr. J. B. Mattison, Medical Director, Brooklyn Home for Narcotic Inebriates, offers a prize of $400 for the best paper on the subject: Does the habitual subdermic use of morphia cause organic disease? If so, what?

Award to be determined by a committee: T. D. Crothers, Hartford, editor *Journal of Inebriety*, chairman; J. M. Van Cott, professor of pathology, Long Island College Hospital, Brooklyn, and Dr. Wharton Sinkler, neurologist to the State Asylum for the chronic insane, Philadelphia.

All papers must be in the hands of the chairman on or before December 1, 1903, to become the property of the American Association for the Study and Cure of Inebriety, and to be published in such journals as the committee may select.

Fracture of the humerus above the condyles, is the subject of Chart No. 9, issued by Battle & Co., of St. Louis. The bones and muscles that are involved or play a part in causing the deformity resultant from this fracture are well depicted in color, making a useful guide to the student in studying the injury. Charts will be furnished on application to the publishers.

Late News Item.

The President appears to have sustained a more serious injury in the Pittsfield accident than was supposed at first, or than he admitted to himself. It is to be regretted that it rendered an abandonment of his itinerary a necessity, but it is fortunate that surgical intervention was so seasonably invoked at Indianapolis. The serous accumulation was released so promptly and the President being enjoined absolute rest, gives promise of his speedy recovery. Even the reopening of the wound that is announced at this writing, and the surgical treatment of the periosteum may not mean more than a little further delay in so robust a person —at all events, let us so confidently hope and believe.

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ORIGINAL COMMUNICATIONS.

Secondary Traumatic Insanity.[1]

ETIOLOGY, SYMPTOMATOLOGY AND PATHOLOGY, WITH REPORT OF CASE EIGHTEEN YEARS AFTER INJURY WITH RECOVERY AFTER TREPHINING.

BY SYDNEY A. DUNHAM, M. D., Buffalo, N. Y.
Superintendent "The Dunham Home," for selected nervous invalids.

"Canst thou not minister to a mind diseased."—MACBETH.

THE case which I am about to report led me to review the subject of traumatic insanity in recent literature. My impressions and conclusions of this review I present to you with the hope that it will lend interest to the subject. Traumatic insanity has been defined by Theodore Kellogg as mental alienation from damage to the organ of the mind by mechanical violence to the cranium, membranes and cerebral tissue.

He substantiates my conclusion in this case when he says "There are cases where we find intervals of weeks and months or years between the cranial injury, which may have caused slight depression of the skull and the attack of mania or melancholia which may manifest a recurrent tendency."

This patient presented no lesion of the tissues but an exostosis of the button of bone removed at the site of injury, which was the source of cortical irritation. Cases are recorded where slight injuries have become a focus from which extensive alterations develop in the cortex and subjacent part.

Head injuries, as a physical cause of insanity, attract our attention because of the opportunities offered the physician and the hope given the patient. We expect fracture of the skull with depression to give mental disturbances, but there is no doubt that in many cases concussion of the brain without

1. Read before section on surgery, Buffalo Academy of Medicine, October 2, 1900; also appeared in competition for the Marcel Hartwig prize for that year.

fracture has produced or predisposed to insanity. The immediate sensory and motor disturbances after injury are well known, but the psychoses developing months and years after injury to the head are not so well understood but are of greater importance.

William Julius Mickle says traumatism may predispose to, or excite attacks of mental disease—the "spark that happens to fire prepared brain." The symptoms at the time of injury may pass off but leave an impression which leads to instability or leave behind some organic lesion which increases and goes on to mental failure. The traumatic factor may be enhanced by the neurotic or insane diathesis, sensitive, excitable disposition, syphilis or alcoholic excesses.

DUNHAM : FIG. I.—SECONDARY TRAUMATIC INSANITY.

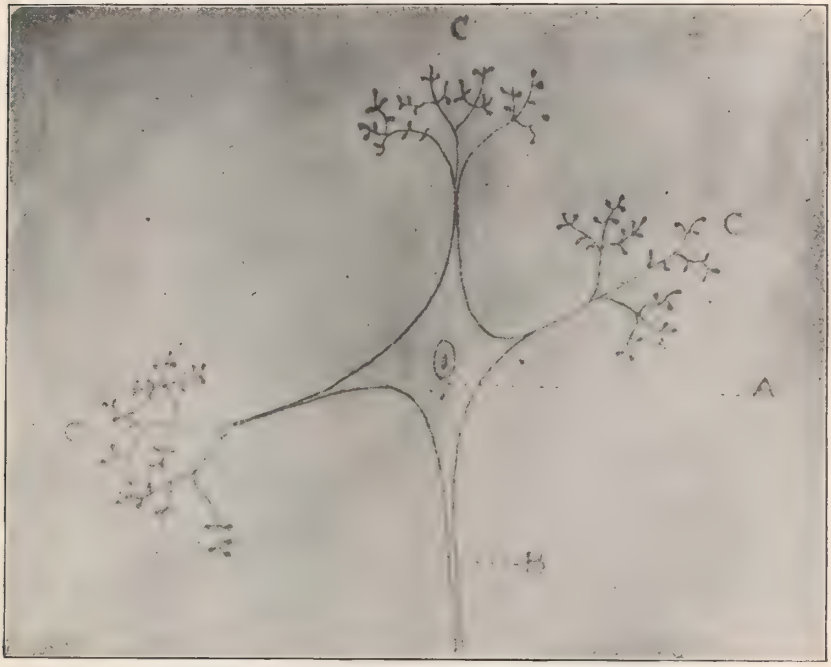
In this case there were no traceable hereditary or acquired neuroses to predispose the patient to insanity, such as instability, insane diathesis, intemperance or syphilis. The initial stadium showed gradual changes in disposition, loss of memory, confused ideas, which later developed into hallucinations, delusions and periodic attacks of mania. The symptoms present were such as headache, vertigo, infidelity in the home, with various disturbances of the special senses.

Exploratory trephining was justified in this case because the operation was free from danger and there was much to be gained if my diagnosis was correct.

PERSONAL AND FAMILY HISTORY.

C. A., born in Germany, aged 42 years; came to this country at the age of 29; always temperate. Father killed by accident. Mother died at the age of 56 of heart disease. One sister living age 37. One sister died at the age of 37; do not know cause.

At the age of 24, patient was hit on top of head by a club in a fight. The next day he felt a soft spot on his head at seat of injury. He was unconscious at the time of the injury about



DUNHAM : FIG. II.—DIAGRAMATIC REPRESENTATION OF A NEURON.

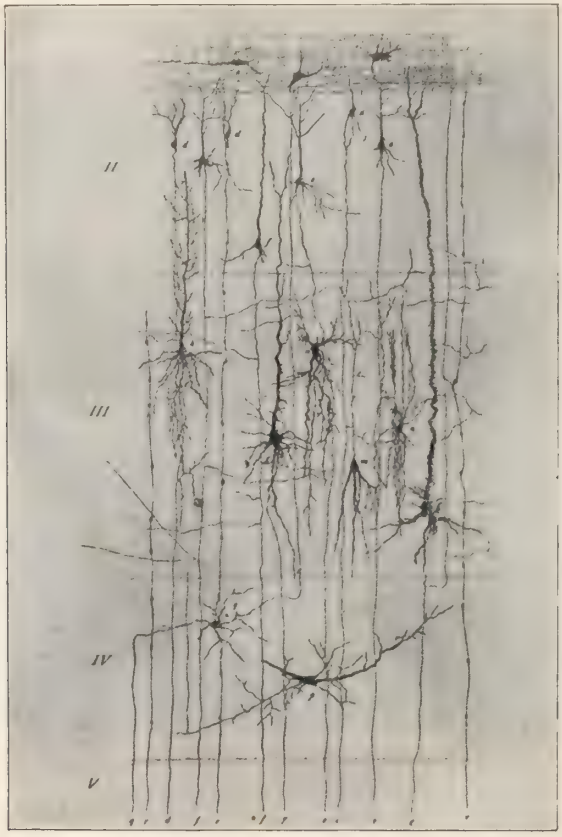
(*Cell body with all its processes.*)

(*a*) Cell body with nucleus and nucleolus.
(*b*) Axon which carries impulses away from cell body.
(*c*) Dendrons ramifying around cell body, conducting impulses to it.

Cut from H. Campbell Thompson's book.

two hours. By pressing on the depressed bone he had pain all through his head. Had no physician at the time. Has never felt good on top of head since injury. Unable to work only half the time for the last two years; does not do work well. Pain in the head over seat of injury or occasional general cranial pain, tinnitus aurium and photopsia. Change of character, such as impatience, apprehension, loss of memory, confusion of ideas, dazed conditions. Physician had recommended asylum treatment one year ago.

Sensory Symptoms early and constant.—Sudden sharp noises go to the spot of tenderness. Riding in an elevator would produce fulness in head and cause dizziness. Could not remember anything that was said in a public address. He was irritable and children annoyed him at home. He was unable to saw wood straight and would file the saw the wrong way. He worked at



DUNHAM : FIG. III.—LAYER OF CELLS OF CEREBRAL CORTEX.

(I.) Superficial layer; (II.) Layer of small pyramids; (III.) Large pyramids; (IV.) Deep layer; (V.) White matter containing neurons from pyramidal cells.
Cut from M. Allen Starr's book.

washing dishes in a bakery, and although the dishes were chiefly tin, his work was inaccurate and not very satisfactory. That was all he was able to do of late years. Could not take alcoholic stimulants without having a headache and losing himself.

Physical Symptoms.—Tenderness always present at seat of injury. Pressure at that point very painful. Sense of weight

and pressure always on top of head. Occasional shooting pain radiating from seat of injury. Anything that increased intracranial pressure would aggravate his trouble.

Mental and Moral Symptoms.—In the last two years has been getting worse and has had several attacks of mania, followed sometimes by great mental depression. He was suicidal. These attacks were periodical and getting more frequent and prolonged. He was changed in character, despondent, impatient and apprehensive. There was loss of memory and confusion of ideas.

DUNHAM : FIG. IV.—SECTION THROUGH THE CEREBELLAR CORTEX.

(I.) Molecular layer. (II.) Granular layer. (III.) White matter.
(*p*) Purkinje cell with its long axon entering white matter.
(*s*) Nerve cells or neurons.
Cut from Starr.

Patient entered Riverside Hospital, December 1, after one of his periodical mental storms. Before operation his pulse was under 70; temperature, below 98°. This has been characteristic of his physical suboxygenation, or as we would say, lowered vitality. A button of bone was removed the following day by Dr. William R. Henderson, of Buffalo. The depressed bone removed was one inch in diameter and situated over the antero-superior angle of parietal bone on right side. It showed that inner table of skull had been fractured, and thickening of inner side of bone had occurred. Dura little thickened but no adhesions. Pulsation fair, hence dura was not opened.

Day after operation temperature and pulse normal. Patient said his head felt much lighter and clearer, and pressure was entirely gone. His expression was much brighter and he was happy all through.

Left the hospital on tenth day feeling well. Reaching home he went to sawing wood with his head down, also hit his head against beam in woodshed. This was followed by hot head and delirium for two days, but was at once controlled by ice cap, bromides and quiet in bed.

He resumed his work in the bakery on January 29, 1901, eight weeks after operation, and has been well ever since. His work has been satisfactory. He is practically a new man. He is still at work and there is no return of head symptoms.

PATHOLOGY OF TRAUMATIC INSANITY.

The pathology of traumatic insanity may be briefly given as follows: reveals dural and cortical adhesions as the most common lesions. We may find thickening of the membranes or bones, inflammatory and degenerative changes extending from the seat of injury; lesions opposite side of injury may occur by contracoup, *e.g.*, (hemorrhage resulting in meningitis and areas of adhesions) osteophytes or splinters puncturing dura and brain, from inner table of skull, substructural or subcortical cysts, necrosed bone.

When secondary traumatic insanity occurs sometime after the injury, when the interval is considerable, the question naturally arises, was the injury the cause? Cases have been reported in which insanity has been ascribed to the injury twenty-three years before.

Statistics by J. Christian, in 1899, Vol. XVIII., page 198, *Arch. de Neurologie*, give tables of interval between trauma and psychosis in a paper entitled, Injuries of the Cranium in their Relations to Mental Alienation, as follows:

Interval.	Insanity.	General Paralysis.	Dementia.	Epilepsy.	Total.
1 to 5 years	17	23	8	6	54
5 to 10 years	6	7	4	4	21
10 to 20 years	3	4	2	2	11
20 to 30 years	2	4	1	. .	7
Over 30 years	1	5	1	.	7
	29	43	16	12	100

STOLPER'S STATISTICS.

He has gone over personally the records of a large hospital for ten years, 1886 to 1896, inclusive. There were 961 injuries of the head. There were 12 which were followed by insanity,

1.2 per cent. Of the 12 cases, 1 only was a comparatively mild injury, all the others being severe fractures of the dome or base of the skull. As the total number of severe injuries of this sort was 138, it follows that the 11 cases of insanity following severe trauma amounts to 8 per cent.

He found out of a dozen or more insane asylums, records representing 18,606 insane, there were 480 cases, 2.5 per cent. of traumatic insanity.

POWELL'S AND HARRISON'S STATISTICS.

The surgical treatment of traumatic insanity, with a contribution of three successful operations, by James Harrison, Liverpool, *Med. Cir. Jour.*, 1898, XVIII., p. 243.

Dr. Herbert A. Powell collected all the cases in literature from 1878 to 1890, and published them in a monograph on The Surgical Aspects of Chronic Insanity. Powell found records of 67 cases and analysed them. Harrison took up the literature where Powell left it off, and could find but 10 additional cases (including his own three), to date (1898). Of this number only 7 had been operated upon at the time of the accident. Forty-eight per cent. of the 70 cases showed depression of the skull which could be felt.

Of cases in which there was no depression, there were cicatrices, evidences of old contusions, tender points, and the like, as well as trephine openings, *i.e.*, when the operation was actually performed these symptoms furnished the indications for intervention.

After the operation the lesions found in association with 48 cases of depressed fracture were osteophytes or splinters from the inner table in 13 cases, thickening of bone in 9 cases, cysts in the dura mater in 3 cases, diseased bone 1, while 1 case exhibited both thickening of bone and subdural and subcortical cysts, and there was 1 case of a bullet lodged in the dura.

In 20 cases in which there were only cicatrices or tender points, there were thickened bone in 6 cases, osteophytes and splinters in 2 cases, serous cyst in 1 case, and adhesion between the brain and dura in 1 case; while in 8 cases nothing was found, and 6 of the 8 made good recoveries.

Taking cases as a whole (77) the dura was said to have been adhesive in 14, and the pericranium in 2.

Results of Operation.—Of the 77 cases, 5 deaths occurred, and of 57 reported in the last 17 years, only 2 died. With

regard to mental state, 51 of the 77 recovered and 12 were much benefited; 5 improved slightly, and 4 not at all.

I have selected the following report of cases from literature on the subject, because they correspond most closely in clinical history and mode of treatment to that of my own case.

C. LOCKHART ROBERTSON'S CASE.

On application of the trephine to the Treatment of Insanity, the Result of Injury to the Head, *London Journal of Psychological Medicine*, Vol. I., 1848, p. 155.

Patient aged 23, sailor; first seen 1845. Ten years earlier he fell from a mast and the accident was followed by acute mania. In six weeks he regained the use of his faculties, but his character changed for the worse. He was passionate and formed intense dislikes, and for this reason was incarcerated in an asylum. Under medical treatment he improved somewhat, but not enough to gain his freedom. About this time he was seen by Robertson who found a distinct depression at the posterior superior margin of the parietal bone, to which locality he referred his pains.

Trephining was decided upon and was performed by Surgeon Furnes. The dura was very adherent at this point. There was no line of fracture in the bone, only a bend. In about 10 or 11 weeks later, patient was discharged perfectly cured.

FLETCHER'S CASES.

In the *American Journal of Insanity*, Vol. 44, W. B., 1887-88, Fletcher, Superintendent Indiana State Hospital for the Insane, reports 8 cases of trephining for secondary traumatic insanity, 4 of them I find similar to my own.

Case I.—Male, age 35, was injured at the age of 29 by falling from a scaffold. Depression of bone at osculation, right parietal and occipital; lost memory and had become inebriate, also had epileptic convulsions. Discharged free from pain and mental disturbances after trephining. An interval of six years.

Case II.—Male, age 47, injured at the age of 44 by being hit on the head by a stove lid. Patient became unconscious for six hours; in bed several days. Resumed work for six months and gave up. He was negligent about clothing and was suicidal and melancholy. Small scar, size of grape seed over parietal suture, inch and one-half from the coronal, scalp adherent and very slight depression of the skull. Trephine was one inch long and a half inch wide; spicula of bone of inner tablet punctured the dura; went home on the seventh day a new man, as he said. An interval of three years.

Case III.—Male, age 37, injury at the age of 13 by small wagon wheel. Epilepsy at 20 and in a fit of frenzy killed his 2-year-old child at 24. Was violent, homicidal, several violent convulsions a month, no depression at the seat of injury. The trephine of bone was one and a half inch in length and one inch in width. Convulsions lessened and at last report had had no convulsions for six months. An interval of 24 years.

Case IV.—Male, age 27, injured at 25, destructive and suicidal; constant pain in the region of the parietal frontal suture, scalp wound very plain, no fracture. Patient benefited by trephining, but still has pain. An interval of two years.

BACON'S CASE.

Trephining of the skull in the case of a lunatic nineteen months after the receipt of a blow on the head. Complete recovery. G. Mackenzie Bacon, *British Journal Mental Science*, 1880-81, XXVI., p. 551.

Male, age 38. Previous health always good but nervous and slender. Was a carpenter; habits good.

In August, 1878, while at work a hammer fell from a height of six feet, striking the top of his head. He was not stunned nor did any untoward symptoms develop, but he "never felt the same" after the blow. Earliest sensations similar to "cold in the head." In the following January he took to his bed where he remained for many weeks—symptoms not stated. When he recovered he was unable to work, as attempts to this end produced sensations of vertigo and numbness in the legs. Could not apply his mind.

In October, 1879, he sought hospital treatment. The principal symptom was a "scrunching" feeling in the vertex, referable to the stellate scar which marked the site of the injury. Disposition irritable and morose and talked of suicide. Other symptoms were dragging pains at the vertex, without intermission; aching pains in both arms and along the inside of both legs; noises in the ears and inequality in the size of the pupils. Very little sleep.

On January 1, 1880, a determined attempt at suicide; he fell fifteen feet down a stairway, spraining an ankle. Transferred from hospital to insane asylum. Was unable to control sudden impulses, restless and sleepless. A slight depression of skull on vertex (left parietal bone). After a month's care was better, but could not control thoughts or acts. Memory poor for recent events.

On March 12, 1880, a year and seven months after injury, it was decided to trephine; operation performed by Wherry, of Cambridge. A piece of parietal bone was taken out at the seat of injury. The dura was purplish in hue, but sound and bulged with pulsations, into the wound. The trephine button was

three quarters of an inch in diameter, and there had been no fracture. The wound healed rapidly and well.

On March 30, his mind was in a much improved state. It was thought best for him to return to his work by June. He was found to be fully able to earn his living.

CAUSES.

The causes which lead up to such severe mental disturbances after so slight an injury with such a long interval, are molecular changes in the neuron, produced by disturbed circulation and impaired nutrition (Fig. iv.) When we think of the minute arteriole twigs passing at right angles into the cortex from pia mater, which have to do with nutrition, we can better understand how an embolism or thrombus, or any foreign substance producing pressure may affect the gray matter and the subjacent cells. The lymph spaces between the arachnoid and pia mater and the lymph channels around the blood vessels, which are so common in the brain, help us to understand how we get cerebral changes when the circulation of either blood or lymph is obstructed. Slight pressure may also interfere with the pulsatory movement of the brain. The functions of the neurons are normally carried on when their nutrition is perfect. The physiological rhythm of the ganglion cells, such as repose and activity, is disturbed when their nutrition is impaired.

Brain pressure is constantly attended by disturbances of the circulation and nutrition of the brain. Meynert concludes that all stimuli acting on the brain (sensorium) create vascular movements and disturb the periodic changes in the condition of the vessels. If the pressure is moderate, the symptoms may remain latent or only show themselves as headache, vertigo, weakness or disturbances of sensory functions.

Recent discoveries in the structure and functions of the nerves help us to explain fully these latent mental manifestations in brain pressure. (Fig. iii.)

The dynamic energy of the neurons is weakened by slight pressure on the ganglion cells, and indirectly by disturbances of circulation of blood and lymph in the subjacent parts. All neurons are contiguous but not continuous with other neurons. Each neuron is a unit anatomically and physiologically (Fig. ii.) The extending and retracting of the processes of the neurons, like that of the devil fish, are lessened when under continued pressure. The more frequent the various processes of the nerves are associated, the stronger they become. Failure

to remember recent events is due to the fact that the associations of the axon are not well made. The weaker the neuron in energy, the more difficult to recall what has transpired; in other words, memory is poor and getting worse.

My case gives a good picture of the failing energy of the nerve centers. This condition in time would have probably terminated in degeneration of nerve cells.

The most important fact in physiology of the nervous system is the independence of the neuron. Clinical observations make it certain that the cerebral cortex is the physical basis of the mind. Certain attributes of the mind are disturbed by certain diseased areas as well as the paralysis of sensation and motion, which always follows injury to certain portions of the cortex.

BRIEF SUMMARY.

Do not underestimate slightly depressed fracture of the skull, for grave symptoms may develop many years afterward.

Whatever increases intracranial pressure aggravates the trouble, hence the inability of these patients to use stimulants.

The symptoms of general paresis, which may develop sometime after injury to cranium, may be relieved by trephining.

Depressed fractures of vertex of head are followed by disturbances of memory, judgment and will power.

Old cases are destined to mania and paresis.

239 DELAWARE AVENUE.

The Methods of Using Argyrol.[1]

BY A. C. BARNES, M.D., Philadelphia, Pa.

IN ACCEPTING your kind invitation to read a paper before you, I am deeply conscious of the honor conferred upon me, because many of your members occupy positions equal in honor and eminence with the leaders in modern progressive medicine. The subject I have chosen was selected for two reasons: first, as a body of practical physicians interested in the extremely important question of the treatment of disease, my subject will probably be interesting; second, my paper will be of the nature of an open letter in reply to many inquiries received from physicians in practically every state in the Union.

1. Read by invitation at the 14th annual meeting of the Tri-state—Alabama, Georgia, Tennessee—Medical Society, Birmingham, Ala., October 9, 1902.

The original report of my colleague, Dr. Herman Hille, and myself, *Medical Record*, May 24, 1902, concerning our discovery of a new silver salt, was given considerable prominence in the medical press of America and Europe, particularly because of its wide field of application in therapeutics. This salt now known as argyrol is chemically silver vitellin, the principal features of which are the high amount of silver contained, its easy solubility, its intense penetrative action and its freedom from the irritating properties possessed by the other silver salts. It is beyond the scope of this paper to deal with the chemical nature of the salt, and those interested therein are referred to our original report.

It is to the clinical applications of argyrol that I would now direct your attention and more especially to the methods of using the product in inflammatory conditions of the eye, ear, nose, throat and genitourinary organs. The methods herein mentioned are those employed in the various clinics in many hospitals, including the University of Pennsylvania, City Hospitals of New York and Boston, Jefferson, Good Samaritan, Berlin Polyclinic, Children's Hospital, Philadelphia, and in some eye and ear infirmaries of several of our large cities, by surgeons whose names and reputations are well known to you: Martin, Thomson, Horwitz, Swinburne, Christian, Lewis, Lederman, Mellor, etc. Most of these surgeons are preparing or have already finished clinical reports embodying their experiences with the salt which will be published shortly. My paper will be merely a short résumé of the methods of using the product now in vogue.

Diseases of the Eye.—Those oculists using argyrol employ it in the conditions formerly treated by silver nitrate or protargol. The rationalé of its use in these diseases is based upon its high proportion of silver, its deep penetrative action and its entire freedom from irritating properties. For instance, a 20 per cent. solution of argyrol corresponds to about a 10 per cent. solution of silver nitrate, yet this strength of argyrol may be dropped in the normal eye without producing irritation or discomfort.

Purulent Conjunctivitis.—A 25 per cent. solution has been found to be the proper strength for routine use. Well established cases of ophthalmia neonatorum thus treated will be eradicated in 2 to 3 days. In the last 10 cases of this affection treated by Mellor at the University Hospital, one day's use of a 25 per cent. solution argyrol sufficed to rid the eyes of pus and

effect uninterrupted recoveries. The argyrol solution should be dropped in all parts of the conjunctival sac every 3 or 4 hours. With treatment instituted early in the disease corneal complications do not occur.

Gonorrheal Ophthalmia.—This is best treated by strengths of 25 to 50 per cent. solutions, according to the stage and extent of the infection. In very severe cases a 50 per cent. solution instillated every 2 or 3 hours produces a reduction of the purulent secretion and affords comparative relief from pain.

An ordinary early case of this disease treated with free use of a 25 per cent. solution every two or three hours will terminate within a few days. For the catarrhal condition of the conjunctiva, resulting from gonorrheal ophthalmia, many oculists direct the instillation of a 10 per cent. solution of argyrol, 3 or 4 times daily; this may be done with perfect safety by the patient at home.

The effects of argyrol in trachoma are still unsettled. Gilfillan, of New York, used it at the House of Refuge with indifferent results. Thomson mentions one very pronounced case in which the lids were so swollen that it resembled ptosis and in which he obtained great improvement by painting the affected lids with a 20 per cent. argyrol solution. This case had been treated with protargol without benefit.

For ordinary catarrhal conjunctivitis a 5 or 10 per cent. solution for use by the patient at home, 3 times daily, with the local application of a few drops of a 25 per cent. solution by the attending physician, produces in most instances prompt and permanent benefit; this same method of treatment is employed in blepharitis, blepharo-conjunctivitis and blennorrhea. The most suitable strength for all around office use in treating corneal ulcers and the ordinary inflammatory conditions of the eye is 25 per cent.; this strength does not cause irritation or discomfort.

The methods of using argyrol in diseases of the *nose*, *throat* and *ear* are perhaps best illustrated by quoting the experience of Dr. M. D. Lederman, of New York, who has been using it for four months in his private work and at his clinics at the Manhattan Eye and Ear Hospital and at the New York Polyclinic. Dr. Lederman states:

I have employed solutions from 10 to 50 per cent. in catarrhal manifestations of the nasal, pharyngeal and laryngeal mucous membrane; the applications were made with the usual

cotton carrier every other day. The advantage this silver salt distinctly demonstrates is its freedom from irritation when applied to sensitive mucous membranes. In acute and subacute laryngitis, I have used a 10 per cent. solution increasing to 30 per cent. without the least unpleasantness to the patient. After 2 or 3 treatments the congested appearance of the membrane gradually left and the voice returned in good volume. I particularly noticed that the harsh and dry sensation produced by silver nitrate was never experienced. The secretion was promptly stimulated by the argyrol solutions and produced a comfortable feeling of moisture in the pharynx and larynx. In postnasal catarrh, the character of the discharge was influenced by the argyrol solutions (20, 30 and 50 per cent.) The thick plugs of mucus, so frequently expectorated in cases of nasopharyngitis and in inflammations of the lymphoid tissues in the pharyngeal vault, became more fluid in consistency —showing the stimulating effect of the drug upon the mucous glands—and thus permitted the reëstablishment of the normal function of the membrane and relieved the annoying symptoms of hacking and dropping in the throat; the same effects were noted from applications to the nasal mucous membrane.

The bland nature of the argyrol solutions was especially observed in cases of so-called "Hay Fever." Argyrol, 10 and 20 per cent. solutions, while naturally exciting some sneezing, as would result from any foreign element, seemed to lessen the existing hyperesthesia and retard the excessive flow of secretion; this blennostatic action, I believe, is due to the deep penetration of the argyrol.

The decided anti-germicidal action of the salt is illustrated by its effects in cases of chronic purulent otitis media with osseous necrosis. In these cases I employ a 50 per cent. solution freely in the middle-ear cavity without any annoyance to the patient. The purulent character of the discharge is obviously modified after a few treatments and assumes a mucoid appearance.

In empyema of the antrum of Highmore, Hitschler used a 50 per cent. solution of argyrol once daily and notes prompt disappearance of the purulent discharge.

Genitourinary Diseases.—Dr. Orville Horwitz, professor of genitourinary surgery, Jefferson Medical College, treats acute cases of gonorrhea by ordering the hand injection of a 5 per cent. solution of argyrol several times daily with whatever modifications and additions to treatment the cases may demand.

In acute gonorrhea, Dr. H. M. Christian, professor of genitourinary diseases, Philadelphia Polyclinic, employs a 2 to 5 per cent. solution by injection (by ordinary hand syringe) 3 or 4 times daily; the solution is held in the urethra five minutes. If

the entire urethra is involved, he employs daily irrigations of 1 to 1000 solution.

In chronic posterior urethritis he makes deep instillations of 5 or 10 per cent. solutions. Of his first 48 acute cases thus treated, 43 showed complete disappearance of gonococci from the discharge within 14 days; 38 of these patients were discharged cured in from 2 to 4 weeks. In no instance did the injections produce irritation or discomfort.

Dr. G. K. Swinburne, surgeon to the Good Samaritan Dispensary,—the largest genitourinary clinic in New York—has treated over 400 cases of gonorrhea with argyrol. His methods are as follows: in acute cases he irrigates the urethra daily with a 1 to 1000 or 1 to 2000 warm argyrol solution and follows this by a 2 to 5 per cent. injection. If the patient cannot report daily he orders the home use of a 2 per cent. injection. He uses argyrol solution for irrigation where formerly he used potassium permanganate or protargol, because of better results and greater comfort to the patient.

In posterior urethritis and cystitis he makes deep instillations of a 5 or 10 per cent. solution. In chronic cases and in those requiring sounds he employs an ointment of 5 per cent. argyrol in lanoline, the ointment being distributed along the urethra by the successive use of several sounds upon the end of each of which the ointment is placed.

In acute cases of gonorrhea seen during the first or second day of the attack, he injects a 20 per cent. solution, and has succeeded in aborting the disease.

Dr. Bransford Lewis, professor of genitourinary surgery, Marion-Sims-Beaumont Medical College, St. Louis, says that he has had much greater success in both aborting and curing gonorrheal infections with argyrol than with any medicament he has ever used. For the abortive treatment of a beginning infection in the male, he prescribes a 2 to 4 per cent. solution for the patient to inject with a No. 23 Goodyear syringe, every two or three hours, day and night, holding it in the urethra four minutes each time, and has the patient call at the office once daily for a pint irrigation of a 2 per cent. solution. If the infection is not so recent, and both parts of the urethra are affected, Dr. Lewis has the patient use both irrigations and anterior injections each day, the former with a one quart fountain syringe, 10 ounces of 1 per cent. solution, and has the patient call at the office every one or two days in order to

reinforce medication and to watch progress, or make variations in measures. For the female, in addition to urethral and vaginal irrigations, according to the location of the infection, Dr. Lewis gently cleans the cervical canal and inserts into it a small strip of narrow gauze soaked in 10 per cent. argyrol solution, leaving the end of the strip hanging out so that the woman can remove it on taking her next douche; a pledget of argyrol-soaked cotton is also left in the vagina.

Briefly stated, the advantages noted in argyrol treatment of urethritis are: the shorter the duration of the disease, the power of the drug to allay the inflammation, the comparative comfort afforded the patient and the entire freedom of the injections from irritating properties.

Diseases of Women.—In specific urethritis in the female, Kevin injects a 10 per cent. solution into the urethra and bladder. In purulent conditions of the vaginal mucous membrane, the vagina is douched with a 1 to 2000 or 1 to 1000 argyrol solution, after which local applications of a 25 to 50 per cent. solution are made through a speculum; these same methods are employed in ulcerations and erosions of the cervix.

Cases of cystitis are irrigated with 1 to 1000 solution, followed by the injection of a 5 or 10 per cent. solution into the bladder, which is retained there for a few minutes and then discharged by urination.

In obstetrics, argyrol is probably destined to play an important part because of its usefulness as a prophylactic against ophthalmia neonatorum. In several maternity hospitals the instillation of a 1 or 2 per cent. solution into the newly born infant's eyes, is a routine practice.

Other clinical conditions in which the use of argyrol has been suggested and is being tried are erysipelas (suggested by Dr. E. B. Gleason, Medico-Chirurgical Hospital, as local applications 25 to 50 per cent. solution) and certain pathological conditions of the mouth and teeth (suggested by Dr. W. H. Snider, of the University of Buffalo.) It is too soon to make any positive statement of the methods or effects of using argyrol in these two latter conditions.

It will be noted in reviewing my paper that argyrol has been used in almost every branch of surgery, but it will be recalled also that silver has been for many years the principal drug in nearly all of these conditions. Silver nitrate is a very valuable remedy, but its chemical nature necessarily endows it with cer-

tain drawbacks, viz.: it is irritating, caustic, is chemically changed by the secretions, and is not penetrating much beyond the surface. Argyrol is not chemically changed by the secretions, possesses intense penetrative power, whereby the effects of silver are exerted in the sub-mucous structures (where they are most needed) and may be used in any structure of the body, in almost any strength without destroying tissue or producing irritation. Furthermore (as all the surgeons mentioned herein have noted and commented upon), argyrol has one very marked property, *i. e.*, its effects in allaying the signs and symptoms of inflammation.

24 North Fortieth Street.

Tuberculosis of the Peritoneum.[1]

By WILLIAM H. MANSPERGER, M. D., Buffalo, N. Y.

THIS not uncommon form of tuberculosis usually arises secondarily from tuberculosis of the pleura or the abdominal organs, so that the continuous extension of the process is clearly demonstrable. In some cases, however, this continuous connection of tubercular peritonitis, with a local tuberculosis in the vicinity, cannot be traced. Here, no doubt, the infection has been carried from some distant focus; either through the medium of the circulation, or through that of the lymphatics. It also appears that cases are not infrequent where there are no other demonstrable lesions of the same nature in other parts of the body. In such a case we would consider a direct infection as being probable, but not positive, as in life the source of the infection is often obscure and the original focus only discoverable at autopsy.

Since the pleura and peritoneum are in direct communication through the intercommunication of the lymphatics of the diaphragm, it naturally follows that the disease is often transmitted from the former to the latter; and this is, in all probability, the usual source of origin in tuberculosis of the peritoneum, situated in the neighborhood of the diaphragm.

Tuberculosis of the bowel is also a frequent etiological factor, and is, as a rule, in the adult, secondary to pulmonary tuberculosis; the active bacillus being carried from one organ to the other by the swallowing of the sputum. Primary tuber-

1. Read before the Erie County Medical Association, September 8, 1902.

culosis of the bowel, however, is not wanting. In children especially does primary bowel tuberculosis occur and is often the cause of tubercular peritonitis. In these conditions it is likely that the virus is swallowed with the food. The process in the bowel begins in the lymphatics of that organ—namely, in Peyer's patches and in the solitary glands; in the large as well as in the small intestines, the ileocecal region being a favorite seat. From these processes of disease in the bowel the infection is transmitted to the peritoneum, either through a process of ulceration without perforation, but usually through the medium of the retromesenteric glands, which themselves become involved and may be felt as enlarged and hard nodular masses behind the mesentery.

In women the peritoneum frequently is the subject of tubercular infection through extension of the process from the genitals. In tubercular endometritis the avenue of infection is often through the tube into the peritoneal cavity; the uterus and ovaries also frequently show localisation of the process, and the peritoneum may become involved by direct invasion from these points.

The urinary apparatus is likewise a favorite seat of this disease, the kidney and suprarenals being often involved in pulmonary cases through the medium of the circulation. The kidney may also become involved by extension of the process up the ureter from without. The bladder is also a frequent location of primary tubercular disease. Why it is that in women the urinary tract is rarely involved, it is difficult to explain; nevertheless, this seems to be undoubtedly the case. The prostate gland, the seminal vesicles and the testes are all prone to the action of the virus, and are often instrumental in the production of the trouble in the peritoneum.

The original focus may be situated in the skin, the lymphatics, the bones, or in almost any other tissue of the body. As tuberculosis has its origin most frequently in tissues which are subject to external influences and irritations, we naturally look to the lungs, the bowels and skin as the most likely portals of entrance; these organs usually themselves become involved and the peritoneum secondarily from these points. The poison may, however, be carried to distant points without the involvement of the point of entrance.

When the virus gains access to the peritoneum that organ soon becomes studded with miliary tubercles; this may or

may not be accompanied by a process of inflammation. The non-inflammatory form of the disease is usually spoken of as tuberculosis of the peritoneum; the inflammatory form, as tubercular peritonitis. In the latter the organ is red, congested and swollen; there is an adhesive agglutination of bowels and neighboring organs, which is everywhere in evidence. In the beginning of the process these adhesions are very easily separated, but in the course of time they become dense and well organised, forming a pseudo-membrane so that no point of separation can be found. In this way the abdominal organs are often distinctly encapsulated by a thickened false membrane. This connective tissue formation, as elsewhere in the body, is followed by contraction and deformity. The mesentery and omentum, on account of their structure, are particularly prone to this process; the omentum often being converted into a hard and thickened cushion, roll or ball; as a result of the contraction and deformity of the mesentery the entire abdominal cavity may be filled with hard and nodular masses.

There is usually a fluid exudate, either serous, hemorrhagic or purulent. The hemorrhagic exudate occurs frequently and is similar to the exudate in hemorrhagic pleuritis. The fluid exudate varies in amount as well as in location; the amount may be very small or it may be enormous; it may be free or it may be localised between the agglutinated loops of intestines.

Another condition which is not only interesting pathologically but is also instructive as to symptoms and diagnosis, is the not infrequent occurrence of cirrhosis of the liver in the advanced stages of this disease.

With the gross pathology so distinct and clearly defined, the inference of an equally distinct symptomatology and clear diagnosis would naturally suggest itself. This, however, is not the case in a goodly proportion of instances, and particularly so in tubercular disease of the female pelvic organs, for here we cannot exclude other pathological conditions with the same amount of certainty as is the case where the disease occurs in the abdominal cavity proper. It should, not however, be inferred that the diagnosis is, as a rule, difficult or impossible; on the contrary, the diagnosis can, generally, be made with as much certainty as in most other diseases, and very often is so simple that it could scarcely be mistaken for anything else. It is only in cases of tuberculosis without evidence of inflammation that the diagnosis becomes to a certain degree impossible.

The symptoms upon which most reliance can be placed in this disease are abdominal pain and tenderness, abdominal enlargement, either general or circumscribed, tumor and fever. The pain is, as a rule, dull and aching, rarely intense, and is circumscribed. Tenderness on pressure is present in all cases, but is rarely very marked, the sensation being one rather of soreness than of acute tenderness.

The general abdominal enlargement may be so pronounced as to resemble ascites or a large ovarian cyst. Here the method of exclusion in the diagnosis becomes very valuable. Our first thought would be to exclude ascites. In ascites we have a number of characteristic symptoms which will rarely lead us astray. We look for bulging of the flank and flattening of the abdomen; where there is free fluid, for dulness on percussing the flank, and for tympany over the abdomen when the intestines are provided with sufficient length of mesentery to permit them to float to the surface. When we are dealing with an ovarian cyst or an encysted tubercular peritonitis, the very opposite holds true; the flanks are contracted, the abdomen prominent and projecting; there is tympany over the flank where the colon is fast through adhesions, and dulness over the prominent portion of the abdomen, because here the prominence is produced by a circumscribed collection of fluid. In ascites we would also look for previous symptoms of contracted liver, gastric hemorrhage, enlarged spleen, edema of the lower limbs and genitals. Having succeeded in excluding ascites we come to differentiate between ovarian cyst and encysted tubercular peritonitis. I believe that inspection alone would be able to decide this problem for us; as in the case of a cyst which is always tense, the overlying abdominal wall is splinted and does not move with the free parts of the abdomen during expiration and inspiration; an encysted distention being less tense and more or less compressible readily permits the movements of respiration to take place.

In the case of hard, circumscribed tumors, with more or less fluid accumulation, we are again confronted with a differential diagnosis between this disease and malignancy of the peritoneum. Here the difference in the character of the pain—sharp and acute in malignancy, dull and aching in tuberculosis,—will be of assistance to us. More important still is the deportment of the temperature; for instance, subnormal morning temperature followed by a rise in the course of the day, especially if

accompanied by sweats and chills, would prove of great value. We would also look for evidence of tuberculosis in other organs.

There are also a number of other symptoms which point quite strongly to the existence of this disease; the abdomen is usually not only distended, but it is unevenly so, some links of bowel being more inflated than others, on account of kinks and adhesions. Palpation at times gives characteristic results, when mesentery and omentum are thickened, hard and deformed, and when some bowel links are more thickened and agglutinated than others, thus producing a field of uneven resistance which can be mistaken for no other condition except malignancy, and this is not very likely. Another condition pointing to the existence of this disease is the presence of a number of localised collections of fluid, which can be distinguished by their fluctuation, dulness on percussion, and from the fact that the fluid does not gravitate to other parts when the position of patient is changed. There may be circumscribed dulness without fluctuation, *i. e.*, without fluid; this is caused by thick fibrinous exudates, and dense agglutinations. A very important condition, and one which I have seen several times, is cirrhosis of the liver; the organ first undergoing enlargement, afterwards contraction. A friction sound over the liver region may also at times be heard.

Diarrhea is often present and is the rule when the trouble is secondary to tubercular disease of the bowel. Constipation is not rare, and there may be partial obstruction when there is much kinking in the bowels. Urinary symptoms only become prominent when the bladder is involved, and this is the rule in pelvic cases. The first symptoms often make their appearance in the right iliac region, owing to the fact that the ileocecal region is a favorite seat of localisation; under these conditions the disease may be mistaken for appendicitis. A positive differential diagnosis would here be impossible, but may be surmised when the patient is suffering with tuberculosis of some other organ.

The female genitals are perhaps more frequently the primary seat of this disease, than any other organ in the abdomen. The reason for this can probably be explained by the frequent occurrence of inflammation in these parts following labor and miscarriage, thus creating a weak point of resistance to the tuberculous material carried there through the medium of the general circulation.

Two other important factors in the diagnosis are the temperature and pulse; lasting hectic with continuous high pulse rate makes the existence of tuberculosis probable.

If puncture is undertaken and the fluid found to be either fibrinous or hemorrhagic the symptom would be quite characteristic. It is always important to look for evidence of tuberculosis elsewhere in the body, because the peritoneal infection is usually secondary in the nature of its origin.

What should be the treatment when the diagnosis has been established? It appears that any effort which we are able to make to influence this disease favorably, apart from surgical interference, is very limited. Aside from the very important constitutional treatment, such as diet, fresh air and rest, nothing but the relief of symptoms remains to be accomplished with drugs. Creosote, guaiacol, cinnamic acid and other drugs which have gained favorable reputations in the treatment of this disease in the lungs give no promise of result or success here. This can also be said of tuberculin. We have the alterative, iodine treatment, and the antiphlogistic mercury treatment, to which we may pin our hopes, and it is possible that we may be able to achieve some results in a few cases, in the very early stages; but where the disease is at all advanced, with the patient's digestive and bowel functions in poor condition, and the disease making daily progress, it is not likely that we would adopt this form of treatment with much hope or ardor, for such treatment requires a long period of time for its proper trial and such time is valuable in a patient with so deadly a disease; so valuable that the patient may be beyond the possibility of help through surgical treatment which alone holds out much hope for success or improvement. Whether or not the surgical treatment is ever followed by a complete cure is difficult to say, for there is a great diversity of opinion on that question. On the other hand, there can be no question as to the great and almost immediate improvement which in the large majority of cases follows its employment. That the ultimate prognosis in this disease, when complicated with pulmonary tuberculosis—and unfortunately such is often the case—is dark, very gloomy, perhaps; nevertheless, the patients may often be so much improved, and their lives so much prolonged that we should always stand ready to give them their only chance. We should, of course, make sure that the patient's strength is of sufficient quality so as to give good promise of withstanding the shock, which is not

very great. In such patients the immediate danger is very small. Why it is that laparatomy so favorably influences this condition has not as yet been satisfactorily explained in a scientific manner. The fact, however, remains that it is usually followed by the complete disappearance of all fluid exudate and a general improvement in all the symptoms. It is true that a recurrence of the process may take place in a comparatively short time; in others, the improvement covers a period of years, and may be permanent.

The technique is usually simple as compared with other operations in the abdomen, as often nothing can be done except to flush out with normal salt solution and to close. If the focus from which the process has spread can be removed without endangering the integrity of intestines and other viscera, it should be done. The most favorable location for this is in the uterus, tubes and ovaries, and these organs when diseased should always be removed when the risk is not greatly increased thereby, because they usually contain broken down foci which may later act as sources of reinfection. Drainage is only employed in the presence of cavities whose contents have undergone secondary infection.

I ask permission to report a small group of eleven personal cases, all of which were treated by laparatomy. Of these, three were males; eight females; in two males and in three females the process was localised; in the other six, generally disseminated over the entire peritoneum. Of the five, in which the process was localised, four are alive and in good health; two, four years after operation; two, two years, and one, one year. Of the six in which the process was general on the peritoneum, three are alive,, and three are dead. Of the three alive, two had recurrences one year and a half after operation; one is in good condition, one year after operation. In four of the eleven, lung disease was undoubtedly present. Of these four three died of pulmonary tuberculosis, one is alive and an invalid; three of the four were relieved of the abdominal symptoms, and were much improved after the operation.

To summarise: in good health, five; died, four; invalids, two. What I have seen, as well as what I have heard and read, all prompt me to enter a plea for the early surgical treatment in tubercular disease of the peritoneum.

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Surgical Tuberculosis.[1]

By G. E. BENNINGHOFF, M. D., Bradford, Pa.

THE surgical part of this subject which has been assigned to me is supposed to deal with diseased conditions more amenable to surgical than medical treatment, or to those cases where it is best to combine both surgical and medical treatment, and the latter is by far the largest class. The surgeon, in thinking of the cases which should be surgical, is not blamable if he brings in his clinical experience, and claims the greater proportion of all, for there are but few cases of tuberculosis that, at some time during the course of the disease, do not have a surgical side. There is no form of the disease existing, wherever it may be, within any of the great cavities of the body or in parts external, that at some time does not present a surgical aspect. We may not always be able to definitely diagnosticate the disease and know that it is surgical, but usually it is present; and, again, what is surgical tuberculosis today perhaps was not so twenty-five, or ten, or even five years ago.

One may say that tuberculosis of the lung is most strictly a medical disease, but how often is the condition in this organ one for surgical intervention and one, too, in which, unless relieved by surgery, there is no relief to be found? But tuberculosis of the osseous system and joints is the pathological condition that must depend most and more often on surgery for cure, and it is here that surgery demonstrates most fully its power to overcome the disease. One may safely say that the success of surgery in bone and joint tuberculosis has been so instructive that it has greatly advanced the treatment of the disease elsewhere in the body. Tuberculous peritonitis would have remained an exclusive medical disease had not surgery of the joints demonstrated its cure by surgery. At the present time, if taken early, the surgeon can promise quite as much in tuberculous disease of the peritoneal or pelvic cavities as he can in disease of the joints due to the same cause.

Tuberculosis is a disease which can exist in almost any part of the body, and it is one too often not recognised soon enough to give either the patient or the surgeon the great benefit of an early cure by operative treatment. It is not infrequently that the surgeon sees patients who have been treated for months and

1. Read by invitation in a symposium on tuberculosis at the midsummer quarterly meeting of the Medical Society of the County of Cattaraugus, August 5, 1902.

even years, for rheumatism of a joint or bone, when the case is one of tuberculosis, and months before should have had operative treatment for the cure of the disease. A mistaken diagnosis between tuberculosis of the joints, where more than one part is affected and rheumatism is very easily made, and I have found myself at fault several times, even when suspecting the condition.

Another form of tuberculosis, which is often mistaken for something else, is tuberculous pelvic disease. This condition is most deceptive, because it frequently is wanting in all symptoms of tuberculosis. One expects tuberculous disease to be accompanied by some thermic range. There should be some fever, and, again, the temperature should be subnormal and there should be loss of weight, some exhaustion and some pain, but very frequently not one of these symptoms will be present in pelvic tuberculosis. The physician's attention will be directed to the locality because of some menstrual or intestinal irregularity, or, possibly, sciatica or bladder symptoms. Examination reveals a mass in one side of the pelvic cavity or perhaps, one in either side, not painful on pressure, very hard, and generally not fixed, but quite frequently movable. For myself, I have usually taken this condition for some form of a tumor, until operation revealed its identity. In the beginning of my surgical work, I thought this kind of abscess nontuberculous, but during the last few years, I have usually been able to classify it, which has been verified by the microscope in a number of cases.

Another condition coming to the notice of the surgeon after considerable valuable time has been lost, is tuberculous empyema. A patient in whom tuberculosis has not been suspected has gone through with pneumonia, or a pleuropneumonia, and while the original disease has subsided, the patient does not make a good recovery. Usually the case is treated expectantly for several weeks, during which time the patient continually grows worse. About this time one begins to think of the possibility of pus in the pleural cavity, but examination gives little information. One looks for a pleural cavity full of pus, whereas in tuberculous cases it is usually encysted and may not at the time it should be discovered, contain more than two or three ounces of pus. Later, when the golden moment has passed, one can discover it with ease.

Tuberculous adenitis is another form of the disease which the surgeon very often finds neglected. The enlarged glands,

especially when they occur in the groin, or inguinal region, are often considered syphilitic, or when they follow scarlatina and diphtheria, and are located in the cervical region, they are thought to be due to one or the other of those diseases. Wherever they may become tuberculous, they are very often thought to be due to some other condition than tuberculosis. The importance of recognising this condition as tuberculous, and immediately extirpating the diseased glands must be apparent to all, for when a tuberculous gland is allowed to remain in the body until it breaks down into caseous liquefaction, the danger of spreading the disease through the entire system is well known, and the surgeon usually sees these cases after this has occurred. As further examples, tuberculous kidney, skin and testicle, might be given as among those frequently overlooked. Time will not permit me to detail the numerous other tuberculous conditions which should be, but often are not diagnosticated early enough.

The successful treatment of surgical tuberculosis depends greatly upon an early diagnosis. The degree of disease present in the part affected is in direct ratio with the number of cures. This is well demonstated by the fact that in tuberculous joints, if the disease is taken early, it may be cured by medico-surgical treatment, or by erasion instead of excision, and the percentage of cures is in favor of either of these methods. When tuberculous disease of any joint, except possibly the hip, has advanced so far that excision is necessary, amputation of the limb above the joint affected is probably the operation best suited to the case, for thus one is sure of having removed the disease with little pain, little time wasted in bed, and little exhaustion. Thus an early diagnosis means early operative treatment, which usually saves the limb, while a late diagnosis means amputation, or its equivalent.

Not only is an early diagnosis necessary for a surgical cure, but also for any other method, whether medical or medico-surgical. At the present time, surgeons are becoming more conservative in the heroic treatment of tuberculous joints, while in treating the disease where it is purely surgical, as that of the pelvic or peritoneal cavity, kidneys, or glandular system, early and heroic methods are used. Inasmuch as ankylosis of a tuberculous joint is the most perfect cure—except in that very limited number where medico-surgical methods cure and preserve the physiological functions of the joint—any treatment

that may cure, either by ankylosing the joint, or that will cure and allow the functions of the joint to remain, would seem the best. That being true, it follows that after becoming assured—and with the aid of the microscope there never need be much doubt—that the disease is tuberculous, one is justified in using any method that cannot produce a condition worse than an ankylosis.

To illustrate the proposition the elbow-joint may be taken as a hypothesis. The joint is found swollen, somewhat flexed, the articular ends of bones enlarged, more or less fluctuation present, motion and pressure painful. With this array of symptoms, and the previous history of the case, one is justified in presuming it tuberculous inflammation of the joint. Under strict antiseptic precautions, the joint can be aspirated and the fluid examined microscopically, thus verifying or nullifying the tuberculous idea of the disease. If there is conclusive evidence that it is tuberculous, one can do no harm by continuing the aspiration until all fluid possible has been drawn away, after which any substance desired may be introduced through the aspirating needle. After using Pennsylvania crude petroleum for two years in various ways as a local antiseptic and an antitubercular remedy, I do not hesitate to recommend it for use in this condition, and have done so in a few instances. I inject the joint with from one-half to two ounces of it. After it is introduced within the cavity of the joint, the parts should be kneaded, so as to distribute the fluid throughout the diseased parts of the structure.

Crude petroleum is very slowly absorbed by the tissues surrounding the parts where it is used. I have removed portions of bone which were tuberculous into the medullary canal, filled the cavity and the entire wound with petroleum, sutured the parts and observed it heal by immediate union, the bone in time becoming healthy. After introducing petroleum into the cavity of a joint, one should expect for two or three days an active reaction. The joint becomes swollen, the temperature of the body is increased from two to three degrees, and there is considerable pain, all of which subsides in the course of a week. Permit me further to state that my knowledge, gleaned from actual experience in the use of petroleum in tuberculous joints is yet limited, having used it in only three cases. Two of these recovered, one with function, the other with ankylosis. I am at present using it in another case, the joint under treatment being

one of four different joints affected in the same patient, the elbow having been erased for tuberculosis. But I have used it in every form of septic wounds and other tuberculous diseases, than of osseous system, and in various ways, such as injecting it into the tissues, by syringing out cavities with it and by packing with gauze saturated with it, and I have seen the most perfect results follow its use.

I should be pleased if some of my professional friends here present would put the agent to the test in order to determine more fully as to its efficacy. In my surgical technique, all the assistants' hands are bathed in crude petroleum, after a thorough scrubbing in green soap and sterilised water. The oil is washed from the hands in alcohol. The oil completely closes all openings in the skin, and all germs are kept from coming to the surface of the skin of the operator's hands. A well-oiled hand is practically a gloved one, so far as preventing skin germs on the hands of the operator from infecting the field of operation.

Apologising for this digression, I wish to say further, that besides petroleum, one need not fear using any other substance in treating joint tuberculosis. The bichloride of mercury, iodoform, and the like, all or any kind of treatment may be used aiming to ankylosis as a cure. Failing to accomplish a cure in a reasonable time, the joint should be erased and ankylosis produced. Failing again, excision or amputation, one or the other, is to be considered.

A Century of Medical History in the County of Erie.—1800-1900.[1]

By WILLIAM WARREN POTTER, M. D., Buffalo, N. Y.

Pioneer Physicians—Medical Societies—Medical Colleges—Hospitals—Medical Journals—Women Physicians—History of Homeopathy—Medical Officers of the Civil War—Individual Members of the Profession.

SUPPLEMENT.

X.—Medical Society of the County of Erie.

AT THE 78th annual meeting, held January 10, 1899, the following-named physicians were admitted to membership: John Hudson Grant, J. C. Clemesha, Emil Lustig, Abra-

1. Note.—The last regular chapter of this history was published in the Buffalo Medical Journal, April, 1899, which brought the record down to that time. Supplementary chapters are being presented from time to time that the history may be carried from that date forward to the end of the XIXth. Century, thus completing it.—W. W. P.

ham L. Weil, Mary Clayton, James W. Charters, N. L. Burnham, Christ A. Weinbach and Charles R. Borzilleri.

The officers chosen were: president, J. B. Coakley; vice-president, E. H. Ballou, of Gardenville; secretary, F. C. Gram; treasurer, Edward Clark; librarian, W. C. Callanan; censors,

JOSEPH C. GREENE, M. D.—1829-1899.

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J. B. Coakley, Irving W. Potter, Thomas F. Dwyer, Charles E. Congdon, F. E. Fronczak.

At the semiannual meeting June 13, the following-named were admitted: H. B. Brownell, Edward J. Kiepe, William B. May, Nelson W. Wilson, Montressor Axford, H. R. Gaylord, Charles A. Brownell and Charles F. Durand.

The deaths during the year were: Dr. A. H. Crawford, January 20, aged 58 years; Joseph C. Greene, January 3,

aged 69 years; Dr. L. P. L. Parker, Akron, January 1, aged 70 years; Dr. Wesley C. Earl, June 19, aged 64 years; Dr. Edward E. Stanbro, November 5, aged 30 years; Dr. W. E. Robbins, Hamburg, December 5, aged 39 years; Andrew J. Volker, December 11, aged 28 years.

Joseph C. Greene, was born at Lincoln, Vt., July 31, 1829, where he resided for sixteen years. His preliminary education was received in public school and academy.

He received the degree of M. D. from Albany Medical College in 1855, after which he practised for a short time in Charlotte and in 1863 came to Buffalo.

He joined the society in 1864 and was its president in 1884. He was a member and at one time president of the Buffalo Historical Society. During the years 1873 and 1874 he was district physician of the Buffalo Board of Health, and in 1885 he served as alderman from the then second ward.

In company with his brother, Dr. S. S. Greene he made a tour of the world, leaving Buffalo, September 3, 1888, spending fourteen months in travel through the eastern countries and Europe. A valuable collection of relics, curios and antiquities, made in Egypt, Syria and Assyria, was, on his return, given to the Buffalo Historical Society.

Wesley Clark Earl was a native of Vermont, where he passed a portion of his early life. He began the study of medicine with Dr. M. S. Kittinger, of Lockport, entered the University of Buffalo for a year and graduated from Bellevue Hospital Medical College in 1864. Soon after graduation he was appointed acting assistant surgeon in the United States Army during the civil war and was first assigned to duty at Fort Schuyler. At a later period his assignment was changed to Elmira, where he served in caring for confederate prisoners under Dr. William C. Wey, who was surgeon in charge.

After the war Dr. Earl located at Pekin, Niagara County, where he practised medicine nine years. He removed to Buffalo in 1874, where he continued in practice until his death. He joined the society in 1875. He was prominent as a physician, representing the best type of family doctor. He served as an officer of the Riverside Methodist Episcopal Church, and was a member of several lodge societies, and of the Society of Vermonters.

W. E. Robbins, of Hamburg, was born in Iowa, on November 7, 1860; he came with his parents to Erie County when a

small boy, the family settling in North Evans. He lived there until he entered the University of Buffalo, graduating with the class of '85. His standing in the profession was high and he acquired a large practice, especially in the southern part of the county. He was a member of the staff of the Erie County

W. E. ROBBINS, M. D.—1860-1899.

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Hospital, and of various medical societies. He had been health officer of the town of Hamburg and held a like position in the village at the time of his death. He joined the society in 1887.

Dr. Robbins was identified with every public movement in his village and had the highest esteem of all its residents.

At the 79th annual meeting, held January 9, 1900, physicians were admitted to membership as follows: Felix Hintz, Catherine E. Kelly, Daniel P. Doyle, William J. Deane, James W. Nash and Ernest W. Ewell.

Officers were elected as follows: president, E. H. Ballou, of Gardenville; vice-president, Wm. C. Phelps; secretary, Franklin C. Gram; treasurer, Edward Clark; librarian, W. C. Callanan; censors, J. B. Coakley, chairman, H. R. Hopkins, I. W. Potter, T. F. Dwyer and F. E. Fronczak; committee on membership, William Warren Potter, chairman, G. W. McPherson and J. J. Walsh.

At the semi-annual meeting June 12, the following-named were admitted: Chauncey P. Smith, William R. Little, Robert K. Grove and Francis M. O'Gorman.

During the year the following deaths occurred: Elias T. Dorland, February 20, aged 67 years; A. R. Wright, February 24, aged 74 years; George S. Palmer, April 16, aged 38 years; L. P. Dayton, May 14, aged 80 years; George W. Lewis, July 24, aged 38 years.

Elias T. Dorland was born at Oswego, April 12, 1832, and his father Joseph Dorland, being a prominent physician in that region of the state. His ancestry were of the old Dutch stock, so famous in the Mohawk Valley, but in early life he came to Erie County, where his preliminary education was received in the public schools and at Springville Academy. He began his medical studies in Buffalo and attended the Medical Department of the University for a year. Afterward he continued his studies in and was graduated from the University of Michigan. After his graduation he was appointed resident physician at the Erie County Almshouse, which post he held for two years. After the expiration of his term of service he engaged in private practice at La Grangeville, Dutchess County, where he remained for twelve years. In 1866 he returned to Buffalo where he resided until his death. Dr. Dorland was one of the best known and most respected of the older physicians in Buffalo.

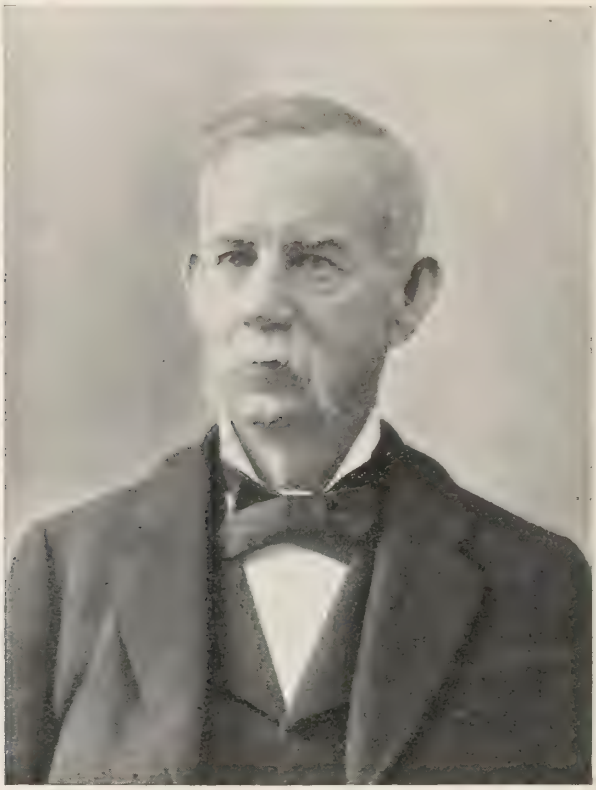
He joined the society in 1869, and served as its president in 1886; he was also a member of the Medical Union, of which also he had served as president; and a member of the New York State Medical Association. During the later years, owing to failing health, he did not take an active part in medical affairs, yet he always maintained a deep interest in the guild.

In 1888, Dr. Dorland became a candidate for the Assembly and his successful opponent was William F. Sheehan, who

ELIAS T. DORLAND, M. D.

became speaker, and afterward lieutenant governor. He was a member of the American Legion of Honor, and a member of the Delaware Avenue Baptist Church.

Lewis P. Dayton was born in Eden, Erie County, in 1819, was graduated from Springville Academy in 1840 and from the Medical College at Geneva in 1845, in which year he settled in Buffalo. From that time on he ranked as one of Buffalo's leading physicians. He was identified with many movements begun by the Medical Society of the County of Erie, and was



LEWIS P. DAYTON, M. D.—1819-1899

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recognised as the dean of the profession of medicine in Buffalo during his later years.

In 1845, Dr. Dayton was elected school commissioner for the town of Black Rock. In 1849 he joined the Medical Society of the County of Erie, was elected vice-president in 1858, and served as president in 1859. During the years 1855, 1856, 1857, 1858, 1862, 1863 and 1864, he represented the old

12th Ward (now the 25th) in the Board of Aldermen. He was Member of Assembly from the Third District in 1865 and 1866, and was Mayor in 1874. He was twice elected County Clerk and served one term as County Treasurer.

FRANK WAYLAND ABBOTT, M. D.—1842-1901.

At the 80th annual meeting, held January 8, 1901, the following-named physicians were admitted to membership: Henry C. Lapp, of Clarence; George N. Jack, of Depew; Wm. C. Jolls, of Orchard Park; Frederick H. Ehinger, of Ebenezer; Prescott

LeBreton, Grosvenor R. Trowbridge and James J. Mooney, of Buffalo.

The election of officers resulted as follows: president, Wm. C. Phelps, Buffalo; vice-president, Walden M. Ward, North Collins; secretary, Franklin C. Gram; treasurer, Edward Clark; librarian, Wm. C. Callanan; board of censors, J. B. Coakley, chairman, and Henry R. Hopkins, Irving W. Potter, F. E. Fronczak, and Henry Lapp, of Clarence.

At the semi-annual meeting held June 11, the following-named physicians were admitted to membership: J. Henry Dowd, Samuel H. Lynde, George H. McMichael and Theodore V. Bauer.

The deaths for the year were: William H. Pleuthner, January 17, aged 32 years; Henry Nichell, February 14, aged 79 years; J. Stone Armstrong, March 3, aged 61 years: Frank W. Abbott, April 9, aged 59 years; Samuel G. Dorr, April 28, aged 61 years; Edward L. Groess, June 19, aged 38 years; Frank P. Bingham, August 2, aged 28 years; Edward P. Hay, August 10, aged — years; Jessie Shepard, August —, aged — years.

Frank Wayland Abbott for years occupied a prominent place in the profession of medicine, distinguished for his skill, judgment, accuracy and integrity. He was one of the most prominent ophthalmologists and otologists in Buffalo, serving in that capacity on the staff of the General Hospital, at the Erie County Charity Eye, Ear and Throat Hospital, and as a member of the Board of Pension Surgeons. For many years he was chairman of the executive committee of the Buffalo General Hospital Training School for Nurses.

Dr. Abbott was also a lay reader of the Episcopal Church. He graduated in medicine at the University of Buffalo in 1866 and joined the society the same year.

Samuel Griswold Dorr came of ancient German lineage and Edmund Dorr, one of his ancestors, came from England to Connecticut early in the XVIIIth century. Captain Matthew Dorr, another of his ancestors, distinguished himself in the war of the revolution. Edmund Dorr, before alluded to, married a member of the distinguished Griswold family, from which Dr. Dorr derived his middle name.

Dr. Dorr was born at Dansville, N. Y., May 30, 1840, where he spent a portion of his early life. He received his preliminary education at Nunda Academy in this state and at the Albion State Academy in Wisconsin. Upon the outbreak of the civil

war he enlisted in the union army, but almost immediately he was seized with diphtheria, which invalided him for a year, hence he was unable to go to the field. In 1863, however, he was appointed a recruiting agent in Livingston County, where

SAMUEL G. DORR, M. D.—1840-1901

he rendered valuable service during the remainder of the war period. After peace came he engaged in the oil refining business in Pennsylvania and established a barrel factory as a collateral branch of the business. These occupations, however, were not

suited to his desires and he turned his attention to medicine, following in this way the traditions of his family. In 1873 he came to Buffalo and entered the University as a student. He took his doctorate degree with honor in 1875 and immediately established himself in practice in this city. He joined the society in 1876.

He served two terms as police surgeon, was at one time a member of the consulting staff of the Sisters of Charity Hospital and a member of the several local medical societies. In 1888 he served in the national republican convention at Chicago. In 1899 he was appointed postmaster of Buffalo by President McKinley and entered upon the duties of that office April 1, in that year. He faithfully served in that capacity until his sudden death from angina pectoris terminated his official career.

SOCIETY PROCEEDINGS.

American Association of Obstetricians and Gynecologists.

Fourteenth Annual Meeting, held at Washington, D. C., September 16, 17 and 18, 1902.

THE President, Dr. EDWIN RICKETTS of Cincinnati, O., in the chair.

An address of welcome was delivered by BRIGADIER-GENERAL GEORGE M. STERNBERG, U. S. Army (retired), late Surgeon-General, of Washington. This was responded to by the president.

DISEASE OF THE PELVIS IN THE YOUNG AND UNMARRIED.

Dr. C. L. BONIFIELD, of Cincinnati, dealt with gynecological diseases which occurred in women who had never had sexual intercourse. Physicians were now more frequently consulted about such troubles, but this was probably because the modern woman bears discomfort less well than her ancestors. Undeveloped uteri, disorders of menstruation, tuberculous disease of appendages and acute displacements are the most common affections in these patients. When menstruation does not make its appearance at the age it is expected, a thorough investigation of the general condition of the patient is indicated. Pregnancy is always to be borne in mind as a possibility. Dysmenorrhea might be constitutional or local. Local treatment is not required

in the former, and the endometritis which causes a majority of the latter can often be relieved by hygienic treatment. Menorrhagia is often caused by anemia, or an interference with the circulation of the liver, heart or kidneys. The uterus in which development has been arrested at the time of puberty is the most important type of undeveloped uterus. It is usually sharply anteflexed, but occasionally retroflexed, and the cervix is long and narrow, and the body dilated. Dysmenorrhea is a prominent symptom. Thorough dilatation, curettage and tight packing, repeated one or more times, if necessary, constitute the best treatment. Tuberculosis of the pelvic peritoneum is often mistaken for typhoid fever or appendicitis. Acute prolapse or retroversion of the uterus may be found as the result of a fall or heavy lifting in young women of lax fiber.

REMOVAL OF THE GALL-BLADDER THROUGH THE LUMBAR INCISION.

Dr. Walter P. Manton, of Detroit, reported the case of a patient 38 years of age, the mother of five children (two abortions), never robust, but able to attend to her domestic duties. She had suffered from a number of gastric attacks, but there had been an absence of symptoms pointing to disease of the biliary tract. Examination showed a loose left kidney, while the right kidney, displaced downward and inward, appeared to be double its normal size and had certain projections which led to the diagnosis of nephroptosis, with probable cystic metamorphosis of the kidney. At the operation, through the nephropexy incision, the fatty capsule of the kidney was found to be embedded in adhesions, which had given rise to the appearance of the enlargement. The kidney which was normal in size and structure, was delivered on the back and placed astride the wound. Below the kidney pouch a distended gall-bladder, containing fluid and nineteen gallstones, the size of hazelnuts, was found surrounded by adhesions. This was enucleated, tied off at the cystic-duct, and removed. The kidney capsule was split and peeled off to the lateral line, fixation sutures were introduced, and the organ was returned to its place. A strip of gauze for drainage was carried from the upper angle of the external wound to the stump of the cystic duct. The patient made a good recovery.

ABDOMINAL AND PELVIC SURGERY AND DRAINAGE.

Dr. Joseph Price, of Philadelphia, said that the more progressive and successful specialists practised most extensive

sponge packing or drainage. The modern operator did the same by his gauze pack or the dry operation. A number of operators, doing fairly good work by the suprapubic route, condemned or partially rejected drainage. Some of them, he said, never learned and never would learn how to handle drainage well. After abandoning the suprapubic route, these men were placed in the uncomfortable position of admitting that drainage did what they had refused to do by suprapubic surgery. About all the reported operations were coming from operators opposing drainage or practising it only when they were compelled to do so.

VAGINAL ROUTE FOR OPERATIONS ON THE UTERUS AND APPENDAGES.

Dr. J. H. Branham, of Baltimore, said that pelvic inflammation was the commonest condition threatening the life of gynecological patients, caused by gonorrhea, abortion, tuberculosis, and other conditions not always discernable. In such the vaginal method of treatment made its best showing. He had operated on more than 100 patients using this method, and had three deaths only. He believes that vaginal drainage is the natural method. It is far more effective and safer. Opening through the vagina was associated with a minimum amount of shock and hemorrhage, and was thus indicated in extreme cases associated with severe toxic symptoms.

ABDOMINAL SECTION AND THE USE OF ICE.

Dr. F. F. Simpson, of Pittsburg, recommended the local use of ice for the relief of pains to prevent or control peritonitis. He began the use of ice after observing its effects in several hundred cases of pelvic peritonitis of all grades prior to operation. He said:

After having seen many grave cases of this kind yield so favorably to this measure, and having seen a few of them die later from peritonitis following an abdominal section, which removed the bulk of filth, leaving but little behind in a fairly clean cavity, it seemed to me that with the same infecting organisms active in large numbers before operation, and in small numbers after operation, we might expect like results if the same treatment were employed in the two classes of cases. And, further, that by beginning the use of ice before peritonitis had actually developed, we might succeed in preventing that condition.

As to theoretical objections, he said that they disappeared when physicians use ice. No injury to the skin has ever followed its use; the healing of wounds had not been retarded by it, and no depression of the general system had been observed. He ascribed the good effect of cold to its deep penetration. This is based on the known effects of cold on inflammation; on the observations of laboratory workers who had shown that cold actually penetrated deeply into the human cavities and tissues; and upon his own experiments on dogs, which showed that by the local use of ice there could be obtained within the adominal cavity such a degree of cold as would retard the growth of pathogenic bacteria and contract the blood lymph channels, thus depleting the hyperemic areas and checking serous weeping into the peritoneal cavity without damage to the tissues.

TETANUS FOLLOWING ABDOMINAL SECTION, DUE TO INFECTED LIGATURES. THE ANGIOTRIBE IN ABDOMINAL SURGERY.

Dr. Walter B. Dorsett, of St. Louis, detailed at length two cases which were of women who had undergone ventrofixation of the uterus, or adhesions of the uterus to the surrounding tissues, due to previous inflammatory conditions. The material used for fastening the uterus was kangaroo tendon. This was the source of infection. He had used the angiotribe successfully 25 times, as follows: abdominal hysterectomy, 10 times; hemorrhoids, 1; pus tubes, 5 times; extrauterine pregnancy, 4 times; dermoid cyst, 1; ovariotomy, 3 times, and 1 in a case of vaginal hysterectomy. He concluded that (1) patients upon whom it had been tried suffered less post-operative pain; (2) no adhesions to stumps had followed; (3) no secondary hemorrhage had followed; (4) it can be applied, when two instruments were used, alternately by the operator and the assistant without the fear of the slipping of a ligature knot, and in less time.

EXPLORATORY LAPARATOMY.

Dr. Walter B. Chase, of Brooklyn, said that physical signs and rational symptoms of certain diseases of the contents of the peritoneal cavity being often insufficient for purposes of diagnosis, surgical intervention might be necessary to ascertain the exact state of affairs. Abdominal section for diagnostic purposes is of comparatively recent origin. Its growth has been progressive, but the limitations as yet are not clearly formulated. In chronic cases there might be ample time for study and analysis,

with comparison of the progress and fluctuation of symptoms, which would furnish valuable data for forming deliberate judgment. Surgical intervention was looked upon much more favorably by a discriminating public today than formerly, so that the suggestion by the surgeon that an operation was required found a more ready response by the patient or patient's friends.

RUPTURED PUS TUBES.

Dr. Charles Greene Cumston, of Boston, spoke of two methods of dealing with pus tubes; one by posterior colpotomy, followed by incision and drainage of the sac, while the other was to remove the tube, and if the condition was bilateral to do a total hysterectomy. Drainage of the perforated pyosalpinx through the vagina was naturally the easiest and least dangerous method. The vagina was incised, and then the pyosalpinx and the walls of the pus tube might be united to the vaginal wall by means of forceps. The best treatment for perforated pus tubes is by abdominal incision. The extirpation of perforated pyosalpinx is particularly urgent in those patients in whom drainage by posterior colpotomy had been unsuccessful, and also in tuberculous lesions of the tubes.

PELVIC ABSCESS AND ITS TREATMENT.

Dr. Herman E. Hayd, of Buffalo, spoke of a class of cases in which vaginal incision and drainage, supplemented by curettage, should be first employed to eliminate the pus, and then an abdominal section should be done later to relieve the patient of her suffering. Large collections of pus, low down in the pelvis, in a moribund woman are best evacuated through the vagina. He spoke in reference to strong women who were suffering from acute streptococcic infection, who had high temperatures with great pain and tenderness, and under ordinary circumstances ready to submit to major operations, and in whom an acutely tender mass could be felt low down in the pelvis on one or both sides, at times filling up the cul de sac of Douglas. For these, early vaginal incision was imperative and was without danger. The mass would diminish in size; the danger of rupture would be minimised, the pain and symptoms would subside.

APPRENTICES IN OPERATIVE GYNECOLOGY.

Dr. J. J. G. Williams, of Philadelphia, said that the modern hospital training, so far as he himself had observed, was not

sufficient for the practical training in gynecological technic. He spoke of the desirability of the modifications in present hospital arrangements looking towards that end. Radical measures, he thought, were alone justifiable in the treatment of pus tubes and that the abdominal route was to be preferred. The vaginal route was simply a makeshift. Whereas the mortality from this latter procedure might be small, the invalidism was very large. Other institutions and other surgeons usually perfected the work, if possible.

BI-INGUINAL CELIOTOMY FOR RETROVERSIONS.

Dr. A. Goldspohn, of Chicago, in speaking of this operation for complicated retroversions of the uterus, claimed that (1) surgical treatment was advisable, since it could do no harm and its good results would not be modified by gestation; (2) the operations in vogue do not meet the ideal requirements; (3) the evolutionary history of the round ligaments showed them to be the ideal structures to utilise; (4) their best service could be gained through the inguinal canals; (5) the lateral inguinal ring gave ample room for the operative technic, with cutting and without fear of subsequent hernia; (6) the histories of 107 cases showed its efficacy; (7) in all the cases recorded the uterus was retained with pronounced anteversion and good involution following childbirth.

STARVATION TREATMENT FOR APPENDICITIS IRRATIONAL.

Dr. John B. Deaver, of Philadelphia, said his experience of ninety-eight cases for two and one-half months past had furnished the objections to the rest or starvation treatment. An early operation, preferably in the stage of appendiceal colic, was the only rational procedure he had found, and was the best treatment to reduce the mortality in acute appendicitis. The so-called rest treatment failed to check inflammation of the peritoneal structures and in the majority of cases did harm to the patient. The statistics he presented supported the argument. He was willing to grant that operation in the presence of an acutely inflamed general peritonitis was attended by great risk to life, and therefore it was often wise to defer operation, hoping that the inflammatory process would become localised. This was often his practice; but the starvation plan of treatment promised no more in such cases than the mere common practice of abstaining absolutely from giving opium, keeping the bowels freely open by cathartics, or, as some physicians preferred, a

hydragogue cathartic, which was both antiseptic and germicidal, giving nourishment by the rectum, when the stomach was intolerant, and using ice or heat locally in the shape of poultices or hot turpentine stupes.

PRESIDENTIAL ADDRESS.

The subject was "Our Shortcomings: Let Us Reason Together," delivered by Dr. EDWIN RICKETTS, of Cincinnati. The general practitioner, he said was the backbone of medicine. It should not be otherwise. With just and co-equal considerate relations the best interests of the physician and specialist were not to be severed. With changed relations toward the general practitioner complications were sure to arise. Abdominal surgery and gynecology in the hands of all operators were being accompanied with a higher mortality than was true of that done by special workers. Reasons were advanced why the physician and all those engaged in the practice of specialties should enter the political arena. It would teach them what organisation is, what power is and how it can be wielded for good. It would result in pronounced efforts for the organisation of the medical profession which in due time was to command respectful consideration from the national, state and county governments. Such would make a free and independent profession. The relationship of the neurologist as bearing on special work should be better appreciated. The neurologist should be called in consultation oftener, and he, in turn, should consult with the surgeon before sending any of his patients to an institution for partial or permanent detention. He urged the appointment of a national secretary of medicine, which, he believed, would put medicine on its highest and broadest plane. This would mean dignity, higher regard, influence, and an equitable financial remuneration.

APPENDICITIS CASES AND THE LESSONS THEY TEACH.

Dr. MILES F. PORTER, of Fort Wayne, Ind., reported eleven cases in detail.

FOUR CASES ILLUSTRATING THE DIFFICULTIES OF DIAGNOSTICATING APPENDICITIS.

Dr. WILLIAM WOTKYNS SEYMOUR, of Troy, reported these cases in abstract. Case I., had previously been operated upon for appendicular abscess. He found a suppurating solid tumor of the ovary. Temperature at the time of operation was

107°; pulse, 180; recovery. Case II., was a woman with contracted pelvis delivered of a dead child. Twelve days later there were symptoms of inflammation in the right iliac fossa, appendicular or tubal, the result of infection. Operation revealed a suppurating gangrenous fibroid of the right anterior uterine wall, which was enucleated, followed by recovery of the patient. Later he did Cesarean section on this patient; mother and child well seven weeks after operation. In Case III. he was summoned to a case of appendicitis some 14 miles distant in the country. His diagnosis was ovarian cyst with twisted pedicle. The mass had increased twofold since his previous visit to the attendant. Removal of the cyst was followed by recovery of the patient. Case IV., woman, single, age about 22. Pains and intense tenderness in appendicular region began with joint pains. Examination of lungs showed bronchial breathing at left base; the next day diffuse bronchial breathing over both lungs. Appendicular symptoms less marked. Toxemia of some sort; no appendicitis.

INTRAUTERINE FIBROIDS COMPLICATING PREGNANCY, AND RETAINED PLACENTA ASSOCIATED WITH INTRAUTERINE FIBROIDS COMPLICATING PREGNANCY.

Dr. M. A. Tate, of Cincinnati, collected thirty-nine cases from literature, and reported two personal experiences. Analysing these forty-one cases, he showed that in nine cases the names of reporters were given. In six the tumor became gangrenous; hemorrhage was a prominent symptom, occurring in eighteen cases; three polyps were expelled spontaneously; seven polyps were removed; in three the polyp was not removed; in ten labor was normal; in four labor was difficult; in two the child was destroyed; one was a case of turning, and the other a breech; in four the tumor was discovered before labor, in all of the rest, afterward; four cases were reported in which labor set in before time; two were at the fifth, and two at the seventh month. The following complications were reported: septicemia, eight; measles, one; puerperal mania, one; retained placenta, four cases. Cold applications, iodides, ergot, whiskey, vinegar, packing of uterus with gauze, and removal of tumor. Causes of death: hemorrhage, three; sepsis, three; peritonitis, one; and collapse, one, making in all eight cases. If all of the other cases, including the nine without histories, recovered there

would be thirty-three recoveries and eight deaths, a mortality of 19½ per cent.

ABDOMINAL SECTIONS DURING PREGNANCY.

Dr. J. Henry Carstens of Detroit, had had the following complications of pregnancy: appendicitis, five; hernia, one; fibroids, four; abdominal hysterectomy, one; vaginal hysterectomy, three; ovariotomy, three; and miscellaneous three, or altogether, twenty cases and five deaths; mortality, 25 per cent. This included all his cases for many years back. Today he thought the mortality would be less. Acute diseases which required prompt operation could be operated upon notwithstanding pregnancy. Tumors that would interfere with labor should be operated on. Tumor above the brim of the pelvis, or which could be shoved above the brim of the pelvis, need not be interfered with; still, as a rule, all tumors took on a very rapid growth during pregnancy, and the increase in size might interfere with the various functions of life and then surgical intervention was required.

DECIDUOMA MALIGNUM.

Dr. Lewis S. McMurtry, of Louisville, reported a case. Clinically, the disease presented a well-defined history. The disease appeared after abortion or labor, the tumor being situated upon the endometrium of the body of the uterus. Of 128 recorded cases, in 40 per cent. the disease appeared after mole pregnancy. Hemorrhage was the first and most conspicuous symptom, and was not controlled by curettage. The discharge was usually offensive, especially in the advanced stage. The disease had a marked tendency to early metastasis; the lungs and vagina were the most common sites for metastatic deposits. The disease was so rapid in its course that the period from first symptoms until the death of the patient was only a few weeks or months. The only successful treatment was the early and complete extirpation of the uterus. In the author's case the disease appeared in a woman of thirty-five immediately after abortion. Persistent hemorrhage and fetid discharge from the uterus prompted operative intervention. The uterus and its appendages were removed by abdominal hysterectomy, and the patient made a prompt recovery.

PERFORATING ULCER OF THE DUODENUM.

Dr. John B. Murphy, of Chicago, reviewed the etiology, pathology, and diagnosis of duodenal ulcers, and considered the

surgical treatment of perforation. An analysis of his twenty collected cases showed: average age in the thirteen cases in which age was stated was thirty-five years. Of the nineteen cases, five were females and fourteen males. Of the twelve cases in which it was stated whether or not there were symptoms present previous to perforation, in nine they were present previous to perforation; in three there were no previous symptoms; in only five cases did the symptoms point to the stomach or duodenum; in six cases it was stated that the perforations were sutured; of these two died, three recovered. In one the result was not stated. In eight cases drainage only was used; of these seven died, and one recovered. He concluded the diagnosis of perforating ulcer was difficult, or, better, practically impossible without an exploratory laparatomy. In many cases there was no evidence of duodenal disease previous to the perforation. The most important physical sign, in addition to those of perforative peritonitis from perforations in other portions of the intestinal tract, was the flatness of the superficial piano percussion note in the right hypochondrium. The leucocytosis in one case, the only one in which it was seen, was pronounced, showed an inflammatory condition, in contradistinction to the usual absence of it in intestinal obstruction and fat necrosis of the pancreas. Leucocytosis, however, was not a necessary manifestation of perforation or of inflammation. It was often entirely absent in typhoid perforations. Collapse was absent in duodenal perforation except when associated with severe hemorrhage. Collapse was always secondary to abrasion or denudation of the endothelial covering of the peritoneum, which abrasion permitted of rapid absorption. In all cases of perforative peritonitis operation should be done at the earliest possible moment after the perforation, and experience showed that the mortality was in direct ratio to the length of time that elapsed between the perforation and the operation. Of thirteen cases operated upon more than thirty hours after perforation, all terminated fatally, while in twelve cases, where less than thirty hours had elapsed, 66 2-3 per cent. recovered. The operation must be complete—that is, it must be pursued to an effective suture of the perforation. Drainage was insufficient, as of eighteen cases treated by drainage alone, all died. The suture of the opening can be easily inserted, as in 98 per cent. of the perforating ulcers into the peritoneum the opening was in the first portion of the duodenum, its most accessible

portion. Where duodenal perforation was suspected, the incision should be through the right rectus muscle. It could then be carried upward to the costal arch, or downward to the symphysis pubis without dividing any of the transverse muscles. The incision through the rectus muscle was the one which he commonly made in operating for appendicitis. It could be enlarged upward or downward without interfering with the muscle fibers. Drainage or no drainage was a matter of personal election, influenced, more or less, by the pathological condition present at the time of the operation. The prognosis depended upon the virulence of the peritonitis produced; the time the material had been allowed to remain in the peritoneum; on the presence or absence of blistering or abrasion of the peritoneum at the time of operation.

PERITONEAL TUBERCULOSIS.

Dr. Rufus B. Hall, of Cincinnati, maintained that tuberculosis of the peritoneum in women is not a rare affection. It occurs often enough to make it necessary to consider it in the differential diagnosis of all obscure diseases in the pelvis and abdomen. In a large majority of cases there were no appreciable manifestations of tuberculosis in other parts of the body. The symptoms simulated several other conditions in the pelvis and abdomen. The diseases most likely to be confounded were the recurrent attacks of appendicitis of the catarrhal form, small fibroid tumors, with old tubo-ovarian disease, and recurrent attacks of pelvic inflammation. If the case is one of tuberculosis, however, the temperature chart will suggest this disease if the record is taken every four hours for a period of ten to fifteen days. In no other condition is there such exact regularity in the afternoon rise of temperature. Cases of tuberculosis of the peritoneum in which there was encysted dropsy, or an accumulation of pus or serum, should be operated on; after the necessary surgical repair the abdomen should be drained. Vaginal drainage in women is preferable, because it gives perfect drainage and prevents ventral hernia.

SURGICAL TREATMENT OF PERFORATED GASTRIC ULCER WITH GENERAL INFECTION OF THE PERITONEAL CAVITY.

Dr. H. Howitt, of Guelph, Ont., said that acute perforation, with general infection of the abdomen, was usually caused by the acute, round ulcer, but might occasionally take place in the

course of a chronic ulcer, especially when it was situated on the anterior wall. All the phenomena of acute perforation might result in either form of ulcer in a more indirect manner by the formation of a localised abscess, which afterward ruptured internally. In peritoneal perforation with general infection medicinal remedies are useless. Early, bold and thorough surgery alone can save the patient. When patient is anesthetised an incision from ensiform cartilage to pubis should at once be made, the bowels eviscerated and protected, then the stomach examined and the perforated part brought out of the wound as far as possible and the field guarded by sponges. The perforation might be excised, but it is generally merely closed with two or more rows of silk sutures. Every pouch and corner in the abdomen should be thoroughly inspected and flushed clean. Drainage tubes are used, not placed in the wound, but through stabs, one at the back in each flank depression below the kidney, and one in the lower abdomen to the right or left of the incision for the pelvis. After the intestines are replaced and omentum is spread over them and fastened below the lower end of the wound with a suture or two, the incision is closed as quickly as possible and dressed. In a desperate condition of the patient, a pint of peptonised milk or other suitable liquid food may be injected into the jejunum during operation.

The author said in conclusion that he was aware that many surgeons strongly objected to evisceration, but he maintained that it was impossible by any other known method to make certain that the cleansing of the peritoneum had been done thoroughly. Imperfect toilet is followed by more shock, and is vastly more dangerous than hours of properly managed evisceration.

CARCINOMA OF THE CERVIX.

Dr. L. H. DUNNING, of Indianapolis, presented a summary of sixty-two cases operated upon by hysterectomy. These cases showed on applying the accepted test of time—five years—that the author had had an encouraging number of cures; they all showed the desirability of early operative procedure. The operative methods employed were indicated, and the author's views of the same were discussed. He reported five cases of carcinoma of the cervix uteri in which the women were alive five years after hysterectomy.

ABSTRACTS.

Surgery of the Heart.[1]

B. MERRILL RICKETTS, of Cincinnati, O., says injuries and surgery of the heart have, until recently, been classed as anomalies. This one fact shows how little confidence there has been in successfully dealing with the heart surgically. At one time simple needle puncture of the heart was thought to always result in instant death. Experimental physiology and surgery shows what can be done and how to do it. It is the basis upon which the heart surgery especially has been placed.

Twenty-five dogs were used in the experimentations. Penetrating and non-penetrating wounds of the heart were made and closed with sutures of different material. Interrupted silk sutures were found to be the best. No especial aseptic precautions were taken as all pathologic conditions were desired. The pericardium may be entirely removed without death resulting. Either one of the coronary arteries may be ligated at its base without producing death. In a certain class of cases it is best to suture the pericardium to the chest wall that drainage may be perfect.

It is ideal to suture during systole, but one will be satisfied to secure perfect suturing in systole or diastole. Even though the auricular is thinner than the ventricular wall it may be sutured with equal success. Owing to this difference in thickness the percentage of penetrating wounds of the auricles is much greater than those of the ventricles. Knotting of the sutures should be firmly secured, otherwise they may become untied by the constant action of the heart.

The sutures should pass through the bottom of the wound when non-penetrating and through the endocardium when penetrating. If not in the latter, the wound may become enlarged from within. Sutures should not be made tight enough to cut the heart tissue. The mortality is less in wounds of the right than those of the left auricle and ventricle. Bleeding is more severe in wounds from sharp instruments than when due to bullets.

CONCLUSIONS.

1. Injuries and diseases of the heart have resisted surgery longer than almost any of the tissues or organs of the human body.

[1] Read before the surgical section, American Medical Association, Saratoga, N.Y., June 10-13, 1902.

2. They, however, no longer offer such resistance but find themselves subject to attack by the same surgical principles as other parts of the body.

3. Experimental surgery teaches one to reason from animal to man.

4. Aneurism, foreign bodies, ossification, together with abscess, syphilis and gangrene possess features which will have a great bearing upon, and will greatly influence the future surgical work of the heart.

5. The application of surgical principles in certain cases of aneurism of the heart will, no doubt, be accomplished by suture, electrolysis, or the injection of gelatine or something of a similar character.

6. The removal of a certain class of foreign bodies, whether they have formed within or have entered from without, should, and no doubt will, be accomplished.

7. That a cardiac abscess should be incised and drained there can be no doubt.

8. Tumors of a pedunculated character on the external surface of the heart can and should be removed.

9. Pedunculated tumors within the cardiac chambers can also be successfully removed.

10. Parasitic cysts (animal or vegetable) when upon the external surface of the heart or in its wall should be incised and drained.

11. Mitral stenosis, hypertrophy and dilatation of the heart will sooner or later find complete or partial relief within the domain of surgery.

12. Injuries involving the myocardium are subject to the same surgical principles as injuries to other important organs of the human body.

13. Lacerated or incised penetrating or non-penetrating wounds of the heart should be sutured.

14. Suturing or any other surgical procedure should not be discontinued because the heart should cease to pulsate. The work can and should be completed within a much shorter time on a quiescent heart.

15. All means should be resorted to, while the suturing of the myocardium is being completed, to reëstablish the heart's action.

16. Drainage of the pericardial sac is necessary in many cases of injury of the heart.

17. Exploratory incision of the pericardial cavity and its contents has been shown by both experimental research and operations upon the living human body to be exceedingly rational, valuable and justifiable.

18. Exploration of the heart itself by puncturing it with a needle or knife to locate a foreign body or to detect pathologic conditions within the myocardium or its chambers, will at no far distant day be found useful, necessary and recognised as an accepted surgical procedure.

19. Why should these conclusions be fallacious when it has already been shown that nine of the twenty-seven cases of heart wounds treated by suture have recovered?

Acetozone in the Therapy of Typhoid Fever.

The recent discovery, by Duval and Bassett, of the presence of the bacillus dysenteriæ (Shiga) in forty cases of infantile summer diarrhea, awakens renewed interest in the subject of intestinal antisepsis. But a few months have elapsed since Drs. P. C. Freer and F. G. Novy, of the University of Michigan, demonstrated the enormous germicidal power of benzoyl-acetyl-peroxide, more familiarly known as acezotone Although the preliminary reports of these investigators were of necessity based upon results of laboratory experiments, their expectations are already being realised in clinical work, particularly in the treatment of typhoid fever.

In Chicago, where a large number of cases of typhoid have been reported, acezotone has been used exclusively in the treatment of about 300 of them. The consensus of opinion is that it causes the temperature to decline earlier than usual in the course of the disease, and it ameliorates the mental and physical condition of the patient, in all probability by controlling the toxemia.

Two Chicago physicians, I. A. Abt and E. Lackner, have thus far reported (*Therapeutic Gazette*, October, 1901,) 40 cases of typhoid in children treated with acetozone, with but two deaths, a mortality of 5 per cent. One of the patients that died succumbed to pneumonia and pulmonary edema, the other to great pyrexia on the fifth day. Stupor and tympanites were almost entirely absent in all the cases; the characteristic typhoid fetor of the stools was markedly diminished, and the hemorrhage occurred but twice, and in the same case. The average dura-

tion of the febrile period, in 37 cases, after beginning acetozone treatment, was 13½ days. The drug did not seem to act upon the heart or respiratory apparatus.

Early this year Eugene Wasdin, M. D., of the U. S. Marine Hospital Service, Buffalo, N. Y., reported 27 cases (*American Medicine*, February 8, 1902,) of typhoid fever, 24 of which were treated with acezotone, all of the patients recovering. The writer says:

Its application in typhoid fever has been followed by very happy results; its use has been directed to the destruction of the germ in its primary lung colony and also in its secondary intestinal colony, and it has been used by hypodermoclysis to combat terminal expressions, with the result that in 24 cases the disease has been limited almost entirely to the expression of intoxication from the primary focus, the intestinal symptoms remaining entirely in abeyance, and the disease has been shorn of many of its most disagreeable features.

In a second paper, which appeared in the *Therapeutic Gazette*, May 15, 1902, the same writer states that his patients were given from 1,500 to 2,000 cc. of the aqueous solution of acetozone daily. The diet was milk diluted with the same solution. The first influence of the drug is observed in the increased secretion of urine. That this is not due wholly to the ingestion of large quantities of water necessitated by the use of the saturated solution is evident from the author's assertion that the same result was observed when acetozone was administered in capsules. The second influence to which attention is directed is the very pronounced decrease of the odor of the stools, while plate cultures from the dejecta showed comparatively few germs.

The deodorant and diuretic effects of acetozone were also observed by G. H. Westinghouse, M. D., of Buffalo (Buffalo Medical Journal, August, 1902, *q. v.*,) who used it in seven cases.

Percussion of the Lower Border of the Liver.—Abrams (*Medical News*, February 8, 1902,) asserts that it is never safe to declare the liver enlarged unless it is palpable. He recommends the following simple procedure for mapping out the lower border of the liver: the patient should incline his body backward as far as possible, while supporting himself, with his hands resting on his hips. Then percussion, which must be light, will determine the lower border of the liver with little difficulty. Strong percussion will cause neighboring hollow organs to vibrate. The finger must be firmly imbedded in the abdominal wall, otherwise the blow will not be transmitted to the liver. The bowels must be thoroughly evacuated before the examination.

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The Pension Bureau and the G. A. R.

THE JOURNAL for October published an address delivered by Dr. J. F. Raub, medical referee of the Pension Bureau, in which the author discussed methods for improving the medical service connected with that office. The paper referred to was read at Saratoga, N. Y., June 9, 1902, at the first annual meeting of the National Association of United States Pension Examining Surgeons. We invite the thoughtful attention of the medical profession to the subject dealt with by Dr. Raub because we deem it an important one. It is a topic, too, that tells of evils which need the influence of the profession to correct.

It appears that there are about 75 medical officers employed in the bureau at Washington, and 4,500 examining surgeons are distributed throughout the several states. In the cities and larger centers they are grouped in boards, consisting each of three members; in the remote regions single examining surgeons perform the duty. These physicians are appointed by the commissioner of pensions upon the recommendation, generally speaking we believe, of members of congress or of other recognised reliable sponsors. This, in brief, is the organisation; now we will consider for a moment the plaint of the Grand Army of the Republic.

The committee appointed by this organisation of veterans at its annual meeting held in 1901, made its report at the recent encampment held at Washington. It is full of acidity in its arraignment of the Pension Bureau, and next after former commissioner Evans its blows are aimed at the head of the medical

service. The complaint is that soldiers entitled under the laws were prevented from getting their just dues by the rulings or orders of Commissioner Evans and the restricted or narrow action of Medical Referee Raub.

The following is an extract from the report on this latter point:

We are convinced that scores of claims are rejected every day that should be allowed.

The "dead line" or place of execution of the veteran's claim was found in the medical division of the bureau, where unlimited discretion seems to be vested to ignore the reports and ratings of examining surgeons and to minimize the soldiers' disabilities.

We find that the bureau has been exceedingly technical, narrow and harsh in the application of rules of evidence.

To every intelligent man the statements quoted will appear most absurd. Both Mr. Evans and Dr. Raub are veteran soldiers of honorable record, and would indignantly resent any charge even of desire to prevent other veteran soldiers from obtaining their lawful rights under the pension laws. Both are honorable men and would equally defend those dearly-bought rights by preventing, if in their power, the conferring of these privileges in an unlawful manner.

These officers have been displaced, whether because of these attacks of the G.A.R., we know not. Mr. Evans resigned last spring and left the bureau for a higher place in the government service, while Dr. Raub has been relegated to a subordinate place in the medical division. All this happened previous to the Washington Encampment, hence it is difficult to understand the force and import of the encampment's action, even from the viewpoint of the G. A. R. Perhaps it was designed as a note of warning to the new régime,—as a club with which to hold the new officials down to the ideas of the leaders of the soldiers' organisation.

If this be its purpose it is a weak invention, for the present heads of the Pension Bureau and its divisions, like their predecessors, must adhere to the law as interpreted by the Secretary of the Interior, who is the responsible head. It is not out of place to consult, for a moment, the annual report of the Commissioner of Pensions for the fiscal year ended June 30, 1902, which contains some interesting figures. It shows that the loss from the pension rolls by death, marriage, legal limitations, failure to claim and for

other causes, was 42,241 in one year. In the same time there was a gain by acts of the Pension Bureau and by special acts of Congress of 43,952, so that there was a net gain on the pension rolls of 1,711. The compiler of the report also estimates the death-rate among the pensioners for the coming year "at about 40,000," and he looks for a reduction of the list "from other causes" by 6,000. The lists which accompany the report show that 738,809 soldiers and 260,637 widows and dependants are receiving pensions. The amount paid to pensioners for 1902 is given at $137,405,268. In 1901 this amount was $138,531,-484. In 1900 the total pension payments were $138,462,131. The pension system since the beginning of the government has cost the vast sum of $2,992,509,019.37. This aggregate is exclusive of the establishment of the soldiers' homes. Surely, the republic is not ungrateful!

In Dr. Raub's paper he discusses calmly and intelligently the difficulties his division encounters from imperfect work done in many instances by incompetent men. He also points out very clearly that properly constructed reports based upon scientific examinations, would serve to clear the pension bureau of many unadjusted claims to the relief of deserving soldiers. If the Grand Army of the Republic would interest itself in aiding to procure the appointment of competent examining surgeons, instead of wasting its energies in attacking the competent officers of the bureau it would again render the country most excellent service. We have already said this is a subject in which the medical profession is interested; or, if not it ought to be. Dr. Raub has done his duty in fearlessly pointing out the difficulties under which the medical division of the pension bureau labors, for which he deserves the thanks of every educated physician.

Let us hope the National Association of Examining Surgeons will become a factor of importance in stimulating better work and in improving the *esprit de corps* of the pension medical service. It deserves the encouragement of the solid ranks of an intelligent profession along these lines.

Hospitals For The Psychopathic.

DURING the last few years the medical profession has been more and more impressed with the fact, that there is a large class of patients for whom there is no proper asylum or abiding place. These patients have physical ailments of such a

character that the general hospitals are not necessary to them, and their mental condition is such that the hospitals for the insane, with their legal restrictions, are for many reasons unfit for their care and cure.

This fact has been appreciated and acted upon by Dr. Frederick Peterson, president of the New York Lunacy Commission. On more than one occasion he has advocated the establishment of institutions for the care of neuropathic persons, institutions where the hysterical, the habit cases, the silent cases of epilepsy and other neuropathics may be sent, and where they may be cared for and studied, without legal commitments.

Being without a full knowledge of his views, we recently requested him to write us for publication the needs of such a hospital. In this way only can the subject be brought appropriately and understandingly before the profession.

This is a new step in advance. Shall Buffalo adopt the suggestions of the Commissioner in Lunacy or shall we go on in the same old way sending cases to the hospital for the insane because there is really no other place for them?

We ask for Dr. Peterson's letter thoughtful attention to the end that that subject may be discussed with intelligence at future meetings of our medical societies. It reads as follows:

OFFICE OF THE STATE COMMISSION IN LUNACY,
ALBANY, October 15, 1902.

Editor Buffalo Medical Journal:

SIR.—I have your letter of October 11 requesting my views as to the need of psychopathic hospitals in the larger cities, and especially as to the expediency of establishing one in Buffalo.

In the first place I assume that all would agree that the sooner a case of insanity, especially an acute one, is put under the best treatment and safest supervision the better. With this idea in view, a sort of emergency hospital, known as the psychopathic hospital has been constructed in a great number of the chief towns in Germany. In many cities, both in this country and Europe, provision has often been made for these emergency cases in connection with general hospitals. Such has been the case for instance in Berlin, Vienna, in Paris, at the Bellevue Hospital in New York and in Philadelphia.

When I was resident physician of the Buffalo General Hospital there was then no asylum in your city and we received emergency cases of insanity at the general hospital, although we had no special provision for them. The methods of commitment are rather slow in this state, and hence many cases of insanity in which treatment should be begun at once have, pending their

examination and commitment by legal process, been incarcerated in jails, station houses, or almshouses for some days without treatment. Where the State Asylum is located in the city limits as at Buffalo and Rochester, the need for a psychopathic hospital is not so apparent as in places like Syracuse and Albany, which are remote from any state hospital. At the same time I have been informed that even in Buffalo, patients are not infrequently kept in station-houses awaiting the necessary legal examination and commitment. It is a fact that patients are sometimes sent to hospitals for the insane who are not really insane, but suffering from various forms of delirium due to typhoid fever, pneumonia and other diseases.

I would say that Albany has already established a reception pavilion in connection with the Albany General Hospital, where all these emergency cases of insanity and cases of apparent insanity are now received. This has proved very successful. If there were such a pavilion in connection with some general hospital in Buffalo, these cases could be received and treated immediately, pending their examination and commitment, and in cases which are doubtful their insanity verified before resorting to the legal process.

Let me call your attention to the statistics of the pavilion for the insane at Bellevue Hospital for the five months ending June 30, 1902. There were admitted 986 patients. Of these 652 were sent to the Manhattan State Hospital; 21 to private asylums for the insane; 33 to other institutions; 79 were sent into Bellevue Hospital as not insane, but suffering from other ailments; 182 were sent back to their friends without commitment; 27 died; 24 remained in the pavilion. What I would especially call your attention to here is the remarkable fact that out of this total number of 986 admitted, 79 were sent into the Bellevue Hospital as not insane, and 182 were sent back to their friends; 27 were so ill that they died in the reception hospital. In their classification of diseases received at the pavilion for the insane for three months ending June 30, 1902, there were 584 cases. Among these were 118 cases of epilepsy, hysteria, chorea, alcoholism, morphinism, and the like, and 28 cases marked as not insane. These satistics afford something of a commentary upon the usefulness of such a reception hospital.

When in Buffalo not long ago, I noticed that the newspapers were agitated as to the proper disposition of alcoholic patients who seem by the accounts given to be delirious but not insane and are sent to the penitentiary for treatment. While I admit that the need for a psychopathic hospital in Buffalo, owing to the presence of a large state hospital in your city limits is not so pressing as in other cities, still I believe that there is a place for a reception pavilion of the kind indicated in connection with some one of your hospitals in the central part of the city. FREDERICK PETERSON.

We have called up this important question in this manner, because it deserves patient consideration in the best light that can be obtained, and no one can speak more intelligently in regard to it than the distinguished president of the lunacy commission. It would be well if physicians in Buffalo, and especially our neurologists, would give this matter early and thoughtful study. We should be glad to have it discussed in the columns of the JOURNAL.

PERSONAL.

HON. JAMES O. PUTNAM, who has been a member of the council of the University of Buffalo since its foundation, and for many years past the chancellor, recently resigned the latter office because of the infirmities of advancing age. The council accepted Mr. Putnam's resignation and voted that the following comment upon it be placed on the records:

The long and devoted services which the Honorable James O. Putnam has rendered to the University of Buffalo deserve special and grateful recognition at our hands, particularly at a time when the infirmities incident to advancing years have made it seem wise that he be relieved of the burdens of the responsible office of chancellor of said university.

It is with very keen regret that we accept Mr. Putnam's resignation and trust that he may still be spared for many years of usefulness in the council.

DR. M. D. MANN, of Buffalo, who attended the recent international gynecologic congress at Rome, has returned and resumed his professional work.

DR. DANIEL LEWIS, of New York, Dr. CHARLES A. L. REED, of Cincinnati, and Dr. JOHN E. RHODES, of Chicago, the committee appointed by the Maltine Company to award the prizes offered by that house for the best essays on preventive medicine, recently held their final meeting in Buffalo. It is probable their findings soon will be announced.

DR. REGINA FLOOD KEYES recently was appointed a member of the medical staff of the Erie County Hospital, vice Dr. Earl P. Lothrop, resigned. Dr. Keyes is also assistant gynecologist

at the Buffalo General Hospital and clinical instructor at the University of Buffalo.

Dr. Mary Clayton, of Buffalo, has been appointed to a place in the medical service of the St. Lawrence State Hospital, and has entered upon her duties there.

Dr. Marian Marsh, formerly of Buffalo, late of Jamestown, has returned to this city and opened offices at 2148 Main Street for the practice of her profession.

Dr. Adolph Lorenz, professor of orthopedic surgery in the University of Vienna, is visiting this country and has recently held orthopedic clinics at several hospitals in Chicago. The special object of his visit was to operate upon a little daughter of J. Ogden Armour, for which it is reported he received a handsome fee. At the clinics referred to, however, he rendered gratuitous services.

Dr. Herman Mynter, of Buffalo, who with his family made an extended tour in Europe during the past summer, has returned and taken up his accustomed surgical work.

OBITUARY.

Dr. Abel Mix Phelps, the well known orthopedic surgeon, of New York, died, October 6, 1902, at the Post-Graduate Hospital from abdominal cancer. His health had been failing gradually for several months, but until the last few weeks he was able to attend to his professional work as usual, and even in a modified degree until within a few days of his death. Two days before his death an operation was performed, which proved unavailing.

Dr. Phelps was born at Alburg Springs, Vt., January 27, 1851, of a family which originally settled in Connecticut in 1630. He was a relative of Edward J. Phelps and William Walter Phelps. After a preparatory course at the Alburg Springs Academy he entered the University of Michigan and was graduated in 1873. He had a bent toward mechanics and made a special study of the anatomical structure of the body bearing upon deformities. He became surgeon of the Vermont

Central Railroad and of large iron companies, receiving many serious accident cases for treatment. In 1880 he went to Europe, studying surgery for an extended period in the clinics of Schede, Esmarch, Von Volkman, Billroth and Thiersch. He introduced American methods of orthopedic work at the Allgemeines Krankenhaus, at Hamburg, and delivered clinical lectures explaining his operations.

When he returned to America he became professor of orthopedic surgery at the University of Vermont; soon afterward he was appointed to a similar position at the University of New York. In 1887 the chair of orthopedic surgery in the New York Post-Graduate Hospital was tendered him. He founded the Home for Crippled Children at Englewood, N. J. In 1894 he was president of the American Orthopedic Association; and in 1900 he was elected president of the Medical Society of the State of New York. He was a member of the Academy of Medicine and a surgeon of the City and Post-Graduate Hospitals. He devised many special operations and surgical appliances and he was a forceful teacher.

Dr. Phelps leaves a widow, who was Miss Cora Bedell, and two daughters.

Dr. Morris J. Asch, of New York, died at Irvington-on-Hudson, October 5, 1902, aged 69 years. He graduated at Jefferson Medical College in 1855, and served in the civil war in the medical corps of the U. S. army. He resigned his army commission about 1870 and located in New York, where he became celebrated as a laryngologist. He served as a surgeon to the New York Eye and Ear Infirmary, to the Manhattan Eye and Ear Hospital and for some years was professor of diseases of the nose and throat at the New York Polyclinic. He was a member of the local medical societies and of the American Laryngological Association.

Dr. Asch was a man of charming manners, of sympathetic nature and inspired confidence among his patients who, with a large circle of friends, will ever cherish his memory.

Dr. John Byrne, of Brooklyn, died at Montreaux, Switzerland, October 1, 1902, aged 77 years. He was one of the founders of Long Island College Hospital and organised St. Mary's Female Hospital. He also was one of the founders of St. Mary's General Hospital and served as president of the staff as well as chief surgeon of the institution from its foundation. Dr.

Byrne was a gynecologist of wide reputation, and was a former president of the American Gynecological Society. He was identified with the treatment of uterine cancer by electrocautery, in the use of which he was expert and wrote many monographs on the subject. He is survived by a widow and two daughters.

SOCIETY MEETINGS.

Buffalo Academy of Medicine.

PROGRAM, 1902-1903.

September 2, Surgery—Surgical treatment of tic douloureux, W. C. Phelps. Presentation of cases, Marcell Hartwig. Discussion, W. C. Krauss.

September 9, Medicine—Stated meeting of the Academy. Syphilis of the nervous system, F. S. Crego. Cerebral hemorrhage following injury to the spine, Sydney A. Dunham.

September 16, Pathology—On the nature and germicidal action of the organic peroxides, F. G. Novy, Ann Arbor.

September 23, Obstetrics and Gynecology—Movable kidney; frequency, method of diagnosis and treatment, A. L. Benedict. Report of cases. (1) Tetanus following delivery; (2) Rupture of the uterus, Irving W. Potter.

September 30, Ophthalmology, etc.—Adenoids, Carl Leo-Wolf, Niagara Falls. Some of the more common forms of ocular syphilis, Arthur G. Bennett. Presentation of cases of sinus thrombosis, Geo. A. Sloan. Radical antral operation, and partial extirpation of the larynx. Exhibition of patients, Geo. F. Cott.

October 7, Surgery—Subject to be announced, Eugene A. Smith.

October 14, Medicine—The works of Edward Jenner, and their value in the modern study of smallpox, George A. Dock, Ann Arbor.

October 21, Pathology—Subject to be announced, George Blumer, Albany. A case of unusual injury of the head, recovery, subsequent autopsy, Henry P. Frost. Trichinosis, Edwin R. Gould.

October 28, Obstetrics and Gynecology—Prophylaxis and treatment of puerperal infection, John V. Woodruff. Infant feeding, A. J. Colton.

November 4, Surgery—Stated meeting of the Academy. Subject to be announced, Roswell Park.

November 11, Medicine—Subject to be announced, George M. Gould, Philadelphia.

November 18, Pathology—On the relation of human and bovine tuberculosis, Veranus A. Moore, Ithaca.

November 25, Obstetrics and Gynecology—Pelvic abscess and its treatment, Herman E. Hayd. A nursing mother, G. W. Taylor. Period of dentition, H. B. Singer.

December 2, Surgery—Subject to be announced, John Parmenter.

December 9, Medicine—Physical diagnosis of cardiac defects, Joseph Sailer, Philadelphia. Stimulation, Eli H. Long. Nephritis in infants, C. S. Jones.

December 16, Pathology—The rôle of the mosquito in yellow fever, Major Walter Reed, Washington.

December 23, Obstetrics and Gynecology—Indications for inducing abortion, Marcell Hartwig. Hodgkin's disease in children, Dewitt Sherman.

December 30, Ophthalmology, etc.—Subject to be announced, H. V. Wurdemann, Milwaukee. Inoculation of smallpox in the rabbit eye, Harvey R. Gaylord.

January 6, Surgery—Subject and essayist to be announced.

January 13, Medicine—Floating kidney, Charles Cary. Subject to be announced, Irving M. Snow.

January 20, Pathology—Stated meeting of the Academy. Intestinal paresis in man, Charles W. Filler.

January 27, Obstetrics and Gynecology—Diagnosis of exceptional conditions in labor, Stephen Y. Howell. Report of anomalous cases, Henry G. Bentz. Ancient gynecology, Henry D. Ingraham.

February 3, Surgery—Subject to be announced, George M. Edebohls.

February 10, Medicine—Infantile eclampsia, A. J. Cotton. Exophthalmic goitre, G. Himmelsbach.

February 17, Pathology—Malformation of female pelvis, J. Whitridge Williams, Baltimore.

February 24, Obstetrics and Gynecology—Deformities of the female pelvis, P. W. Van Peyma. Subject to be announced, C. C. Frederick.

March 3, Surgery—Subject to be announced, Benjamin Graves, Boston.

March 10, Medicine—Cardiac disease, H. C. Buswell. Subject to be announced, A. L. Benedict.

March 17, Pathology—Valvular lesions of the heart, Wm. S. Thayer, Baltimore.

March 24, Obstetrics and Gynecology—Why minor gynecological operations fail to give anticipated results, S. Goldberg. Subject to be announced, Earl P. Lothrop.

March 31, Ophthalmology, etc.—Stated meeting of the Academy. The reduction of the eye in cave animals, Carl H. Eigenmann, Bloomington, Ind.

April 7, Surgery—Subject and essayist to be announced.

April 14, Medicine—Report of thirty cases of pernicious anemia, Charles G. Stockton, and A. E. Woehnert. Subject to be announced, Julius Ullman.

April 21, Pathology—Subject to be announced, A. E. Woehnert.

April 28, Obstetrics and Gynecology—Injuries to the parturient canal during labor; their prevention and treatment, C. E. Congdon. Subject to be announced, L. G. Hanley.

May 5, Surgery—Subject and essayist to be announced.

May 12, Medicine—Splenic anemia, Irving P. Lyon. Subject to be announced, Delancey Rochester.

May 19, Pathology—Biological test for the blood of different species, Irving P. Lyon.

May 26, Obstetrics and Gynecology—Stated meeting of the Academy. Relative indications for Cesarean section, symphysiotomy and perforation, M. D. Mann.

June 2, Ophthalmology, etc.—Adenoids from the standpoint of the general practitioner, Carl G. Leo-Wolf, Niagara Falls. Pharyngitis, Frank W. Hinkel.

June 9, annual meeting.

The Southern Surgical and Gynecological Association will hold its twelfth annual meeting at Cincinnati, November 11-13, 1902, under the presidency of Dr. William E. B. Davis, of Birmingham. The preliminary program has been issued announcing 36 papers, which deal with a great variety of subjects full of interest to both surgeons and gynecologists. A large attendance is anticipated, this being the first meeting of the association north of the Ohio river. The railroads grant the concession of a fare and a third. It is expected the headquarters of the association will be at the Grand Hotel, in which also the meetings will be held.

Dr. Thaddeus A. Reamy, the veteran gynecologist, is chairman of the committee of arrangements, and Dr. William D. Haggard, of Nashville, is the secretary. Either of these officers may be addressed in regard to details of the meeting—the first-named as to accommodations and the like, and the second-named in regard to the program.

The New York State Medical Association held its annual meeting at New York, October 20-23, 1902, under the presidency of Dr. A. A. Hubbell, of Buffalo. The officers elected for the ensuing year were: president, Frederick H. Wiggin, New York; vice-president, William H. Thornton, Buffalo; secretary, Guy D. Lombard, New York; treasurer, E. H. Squibb, New York.

The Vermont Society for the Study and Prevention of Tuberculosis was organised at Burlington, September 28, 1902. Officers were elected as follows: president, Hon. E. C. Smith, of St. Albans; vice-presidents, Drs. Don D. Grout, of Waterbury, and C. W. Peck, of Brandon; secretary, Dr. H. E. Lewis, of Burlington; treasurer, H. L. Stilson, of Bennington; executive committee, Drs. H. D. Holton, of Brattleboro, W. M. Platt, of Shoreham, Henry Ballard, of Burlington, E. H. Ross, of St. Johnsbury.

The Medical Association of Central New York held its 35th annual meeting at Syracuse, October 21, 1902, under the presidency of Dr. A. L. Beahan, of Canandaigua. The program contained a list of 18 papers, most of which were read either in detail or by title, and will be printed in this Journal.

The Oregon State Medical Society held its annual meeting September 11, 1902, when the following-named were elected officers: president, Henry Waldo Coe, Portland; first vice-president, F. W. Van Dyke, Grants Pass; second vice-president, J. A. Geisendorfer, The Dalles; third vice-president, J. P. Tamiesie, Hillsboro; secretary, A. D. Mackenzie, Portland; treasurer, Mae H. Cardwell, Portland.

COLLEGE NOTE.

The Medical Department of the University of Buffalo opened its course this year with the usual attendance, the freshmen class having the average number of matriculants.

A change has been made in the institution that has been very noticeable, "hazing" of freshmen and rushes between classes having been abolished. This is due to the decided action of the college faculty, which apparently has been successful. The upper class men, however, think that the incoming students will always miss something from their college experience, for they cannot look back with pleasant remembrances to their "introduction" to fellow students.

Students in physiological laboratory work are especially pleased with the outlook for study and investigation this year. During the last few weeks contractors have been at work constructing and fitting up a new laboratory for physiological research and experimental study. The necessary space has been obtained by extending the floor directly across the building from the anatomical rooms. This, of course, cuts down the size of the chemical laboratory, but in no way interferes with its efficiency. These improvements will afford increased facilities for individual work and research. New and thoroughly modern apparatus is being installed and prepared for use. Drs. Busch and Van Bergen will have charge of this department of medical instruction as heretofore.

BOOK REVIEWS.

A Treatise on Diseases of the Skin. For the use of Advanced Students and Practitioners. By Henry W. Stelwagon, M. D., Ph. D., Clinical Professor of Dermatology, Jefferson Medical College and Woman's Medical College, Philadelphia; Dermatologist to the Howard and Philadelphia Hospitals. Octavo, 1125 pages, with 220 text-illustrations, and 26 full-page lithographic and half-tone plates. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $6.00 net; Sheep or half-morocco, $7.00 net.]

Dr. Stelwagon's work is sure to win for itself a high place among the more pretentious textbooks relating to affections of the skin. The task of preparing this book has been unusually arduous, on account of the introduction of a vast amount of absolutely new material brought to light by more recent discoveries and developments. Of course, a considerable number of the subjects must necessarily have been derived from the foreign schools, but we are glad to notice that the merit of our American dermatological contributors has been specifically recognised in this volume.

It has been the habit of previous American authors to pass by the work of their own countrymen and substitute the reviews of foreign writers, which, in many instances, are inferior to

those of our own; so that a work combining the two, and enriched by the criticisms originating in so keen a mind as that of Dr. Stelwagon, must be of the highest interest and the greatest possible value.

The classification adopted is that of Hebra, with modifications by Crocker and Morrow. It is, of course, still difficult to find any basis of classification that does not distinguish between affections which ought to be found in close juxtaposition. A classification constituted from an etiological point of view must of necessity be truest to nature, and is invaluable from a practical standpoint.

Hebra's classification is not adapted to the modern idea, as it embraces too many old traditions and often impedes more than it helps. Nothing seems possible, at present, but to postpone this whole matter to some future time when the bacteriology and pathology of the several dermatoses shall be better understood. Comparing a treatise of equal size published twenty years ago with the present one, it is easy to discover, not only a marked increase of diseases, but also a further separation of affections formerly included under a single designation.

It requires a clear and most intelligent judgment to sift from the profuse crop of dermatological literature that which is most likely to prove of value, and to assign it to its proper place and importance, in which attempt the author has perfectly succeeded. The references throughout the volume are conveniently arranged as foot-notes, and their value can hardly be over-estimated. We do not know of a similar English work where the references are so ample and admirable.

The introductory part of the book is on the anatomy and physiology of the skin. It is singularly short, although corresponding to the treatment of the subject as given by other authors. This might have been improved upon by presenting more correlations, with the purpose of leading up to the subsequent description of the pathological processes.

A number of new subjects are here treated, which have either come to light since the preparation of the last textbook, or have been crystalised from more or less vague conceptions into clearly drawn entities. Porakeratosis variegata, erythroderma pityriasique en plaques dissinnirees are placed under separate headings, although, according to the late conclusions of T. Colcott Fox and J. M. H. Macleod, these two conditions could be properly classed together. A papular persistent dermatosis, described by Johnston and yet unnamed, this author puts in juxtaposition with prurigo, which would more properly be included in the urticarial group.

Inasmuch as it would be impossible to discuss all the articles in a review of this kind, a slight reference will be made to the more common affections. In discussing eczema, the writer confines himself to the common phases of the disease. The

multiplicity of exciting and predisposing causes is recognised, although the doctor's position regarding the parasitic theory is left to conjecture. The recent work of Bockhart (*Monatshefte für praktische Dermatologie*) upon this subject should have received consideration by the writer. His discussion of eczema is very much after the style of Duhring in his work on Cutaneous Medicine. Much space is devoted to diagnosis and the treatment of each variety of the disease, and it would seem that the best dermatologist could not fail to receive new hints concerning both.

The article upon impetigo contagioso is characterised by lack of recognition of the large increase of this disease among adults within the last few years and the omission of the fact that the disease so often asserts the ring,—a fact emphasised by the unnumbered epidemics incident to the last few years. The illustrating photographs are fairly good, lacking, however, sufficient explanation and comment.

A valuable factor of the work consists in combining into a single group the tuberculous diseases of the skin—papilloma, anatomic wart, lupus vulgaris and tuberculous cutis—all due to the bacillus of Koch. These were formerly classed under separate headings in different parts of the book, but are now found under the generic title of tuberculosis cutis. We commend Dr. Stelwagon for this sensible innovation, and wish he had gone even further and included the dermatoses of scrofulous subjects, so cleverly classified by Johnston under the name of paratuberculoses.

The defects in Dr. Stelwagon's book are hardly worth considering when contrasted with its merits. The work deals with what is practical in the science, together with the etiology and pathology. It is replete with information which has not merely been gathered but absorbed by the writer and assimilated with his almost unlimited experience. The clinical and pathologic features are emphasised by an extraordinary number of illustrations, the best of which are reproduced from Mracek's Hand Atlas, which contains the finest colored pictures yet given to the public. One must not, however, forget the value of black and white pictures, which when well done—as in this instance—are better than the average of the colored. Dr. Stelwagon has presented in this work a large number of illustrations from his own collection, with many reproduced from other authors—most of which are of genuine importance.

The subject of treatment is well handled. The usual multitudinous and often confusing references to various authorities are here wisely omitted. Dr. Stelwagon states clearly and concisely what a large experience has taught him, and outlines the treatment which has been found to be most efficient.

The book has been written for students and practitioners of medicine and fully accomplishes its purpose. On the whole, it is the most complete and satisfactory treatise on skin diseases

in the English language. To the student it will prove of inestimable value on account of its clearness, conciseness and logical sequences, as well as its numerous apt illustrations; to the practitioner of medicine, it will be of great service—by means of it he will gain a more comprehensive insight into the particulars of one of the exact sciences and, at the same time, receive valuable information respecting other departments of medicine. To the expert dermatologist it will be of great interest, furnishing him with new hints and leading him into fresh avenues of thought. The mechanical portions of the book are worthy of all praise—clear text, striking captions, tasteful arrangement and neat and sensible binding. G. W. W.

CELLULAR TOXINS, OR THE CHEMICAL FACTORS IN THE CAUSATION OF DISEASE. By VICTOR C. VAUGHAN, Ph. D., M. D., Professor of Hygiene and Physiological Chemistry, and FREDERICK G. NOVY, M. D., Junior Professor of Hygiene and Physiological Chemistry in the University of Michigan. New (4th) edition, revised and enlarged. In one 8vo volume of 480 pages, with six illustrations. Lea Brothers & Co., Philadelphia and New York. 1902. [$3.00 net.]

It is difficult to realise that fourteen years—the period that has elapsed since the first edition of this book appeared, under another name, however,—have intervened between the views then announced and those prevailing today concerning the chemistry of infectious diseases. The nature of the change has been so succinctly stated by the authors themselves that we cannot refrain from quoting them:

> When the first edition of this book was written it was believed by those most competent to speak on the subject, that the basic products of bacterial growth constituted the chief factors in the causation of the infectious diseases; but it has been shown by subsequent discoveries that this conception is erroneous, and we now look for the specific bodies among the synthetic substances formed within the cells of the microörganism.

The discovery of essential facts that research has made, constitutes a reason not only for changing the title of the book, but for reconstructing it so thoroughly as to make the present edition almost a new work. The entire study of the subject embraced in the present title is fascinating and, as presented by these authors, becomes more easily mastered than by many is thought to be possible. The etiological classification of diseases given is simple and brings the subject at once before the reader. Working on this basis the student may soon arrive at a clear understanding of the methods of the authors and will thus be enabled to follow them to their conclusions.

In order to appreciate the treatise it should be studied as a whole, but we may be permitted in this cursory notice to point out some of the chapters as possessing special importance. One of these is chapter four in which the bacterial poisons of some of the infectious diseases are considered. Of special interest are the accounts of the germs of diphtheria, tuberculosis, and of suppuration in general. Another chapter of interest is

the ninth which deals with immunity. A careful reading of this chapter will serve to remove many doubtful points relating to this important subject, and to set right many misunderstood questions in regard to it. Still another interesting portion of the work is the chapter on food poisoning, a subject with which every physician should become familiar.

It may be remarked that while much of the work is of a technical character, useful especially to the laboratory worker, there is yet a considerable portion that comes within the domain of the clinician and will prove of great use to him in the intelligent treatment of disease, and to the sanitarian and health officer in the prevention of many maladies.

THE DISEASES OF THE THROAT, NOSE, AND EAR. By CHARLES P. GRAYSON, M. D., Lecturer on Laryngology and Rhinology in the Medical Department, University of Pennsylvania; Physician in charge of the department for diseases of the Nose and Throat in the Hospital of the University of Pennsylvania; Laryngologist and Otologist to the Philadelphia Hospital. Octavo, 540 pages with 129 engravings and 8 colored plates. Philadelphia and New York: Lea Brothers & Company. 1902. [Cloth, $3.00 net.]

Laryngology is becoming rich in its literature, many valuable contributions to it in the nature of textbooks having been made within the last few years; also, there has been much in the way of journalistic contributions that is worthy of preservation, so that the student or junior physician need not lack for book instruction. The chief difficulty they are likely to encounter is in the selection of the best, where the supply is so liberal, and the choice must be limited. Not so with the veteran laryngologist, himself perhaps a creator of or a contributor to the literature of his specialty. The special object of review notices should be to aid the former group in the selection of their books. This we will endeavor to do.

Grayson presents a somewhat novel proposition, which he announces as follows:

> In many of the recently published works that deal with diseases of these specialised regions so great a number of remedies will be found, and such a generous variety in the methods of treatment suggested, that they can scarcely fail to prove embarrassing to the younger or less experienced reader. The author has endeavored to eliminate the difficulty of choice by giving under each disease but one plan of treatment—that which he has found to have been most often successful in subduing its symptoms and shortening its duration.

This, in our opinion, is a distinct advantage given this treatise for the group of readers it is especially intended to reach. The advanced laryngologist may not be disposed toward this plan, but he will be equally eager to obtain the book for he will discover that it is one he cannot afford to ignore or go without. The first two chapters will appeal to beginners in a special manner, for they teach the selection and care of instruments and the examination of the patient. These topics are presented so clearly and so simply that they cannot fail to attract attention.

Another strong feature of the work is the stress laid upon the anatomy and physiology of the nasal structures, and especially does Grayson clearly differentiate the turbinates, which every laryngologist must learn at the threshhold of his career. Turning to the chapter on the ear, the same remark as to the anatomy and physiology section might be made with appropriateness. Again, this author devotes much space to and gives clear and scientific teaching regarding that important and quite common affection, chronic catarrhal otitis media. It is from neglect either to recognise or to give heed early to this disease that many obstinate or incurable maladies later balk or thwart the best skill.

This book is double-leaded in the text from the first chapter to the last, which makes it pleasant reading for the eye; and the finely finished paper permits the illustrations to be clearly brought out, many of the latter being worthy of note. If we mistake not Grayson's laryngology is destined to take a foremost place.

American Edition of Nothnagel's Encyclopedia, Vol. III. Diphtheria. By Wm. P. Northrup, M. D., of New York. Measles, Scarlet Fever and German Measles. By Professor Dr. Th. von Jürgensen, Professor of Medicine in the University of Tübingen. Edited, with additions, by William P. Northrup, M. D., Professor of Pediatrics in the University and Bellevue Medical College, New York. Octavo, 672 pages, illustrated, including 24 full-page plates, three of which are in colors. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $5.00 net; half-morocco, $6.00 net.]

Owing to the fact that the German author of the article on diphtheria in the original work had arranged to issue a separate translation of it, the editor of the American edition, Dr. Stengel, was obliged to cast about for an author to write an entirely new article. Fortunately, a most competent one was found in the person of Dr. William P. Northrup, who has presented the subject so completely that no loss is sustained by the numerous readers of the work.

The whole subject of diphtheria is detailed in a most attractive as well as instructive fashion, and especially is the treatment of this direful affliction delineated in a thoroughly scientific manner. The two recent additions to the armamentarium—antitoxin and intubation—are described with much care and their values adequately fixed. Especially is intubation given important place and its technic minutely described. Dr. O'Dwyer's great work in placing intubation upon an enduring footing is properly set forth. Dr. Northrup, having been associated with Dr. O'Dwyer at every step in the perfection of intubation tubes, is particularly fitted to describe this aspect of the treatment of diphtheria.

It is with much satisfaction that we note that Jürgensen has written the article on the acute exanthemata,—measles, scarlet fever and German measles. His distinction as a writer and teacher on internal medicine has been acknowledged for a quar-

ter of a century, indeed since his famous contribution to Ziemssen's Cyclopedia. His monograph on measles in this book will be found comprehensive and is the best exposition of the subject thus far made. So, too, it may be said of that on scarlatina, which is equally comprehensive in clinical details, while for exactitude of statement and clearness of expression it is unrivaled. His discussion of Watson Williams's "fourth disease" will be found interesting. Jürgensen seems to accord it an appropriate place.

The illustrations deserve mention, there being cuts in the text, plates, and color engravings, plate 7, comparing diphtheria of the pharynx and tonsils with follicular tonsillitis, being worthy of special note. The entire book is a creditable companion to the volumes of the series that have preceded it.

Applied Surgical Anatomy Regionally Presented, for the use of Students and Practitioners of Medicine. By George Woolsey, A. B., M. D., Professor of Anatomy and Clinical Surgery in the Cornell University Medical College; Surgeon to Bellevue Hospital, New York. Octavo, 511 pages with 125 illustrations. Philadelphia and New York: Lea Brothers & Company. 1902. [Cloth, $5.00 net; leather, $6.00 net.]

The older anatomists, Vesalius and his followers, were wont to infuse the study with something of poetry, something of art as well as science; at least they made artists and the artistic contribute to its interest. The teachers of later days omitted almost everything from their anatomic courses, except the mere description of the tissues, hard and soft, and the viscera. In the closing decade or two of the last century, however, the artistic again began to play an important part in teaching what to many would otherwise prove a dry subject.

Woolsey has adopted this method and has imparted zest to its investigation, by coupling anatomy and surgery, a knowledge of the former in all its details being necessary to those who practise the latter. But it is not alone to surgeons that anatomy must be known, for the physician, likewise, must be acquainted with its mysteries and intricacies. This knowledge can be acquired more readily region by region than in any other way, hence anatomy regionally applied is quite as valuable to him as to the surgeon. Moreover, the undergraduate will find this method of application more interesting as well as more useful.

The author proves himself a practical anatomist by the manner in which he takes up the subject, as well as by the detail with which he applies it through the several regions of the body. The text is clear from contents to index, the sections are well defined by captions in heavy type, and the illustrations are singularly artistic in execution.

Woolsey's anatomy is one of the books that is likely to attract the attention of teachers, practitioners and pupils, because of its value as a textbook, as a work of reference, and as a practical manual for the anatomical laboratory. It is a decided addition

to the literature of anatomy because it presents the subject in a different manner from that in general and, further, because it presents it well.

PROGRESSIVE MEDICINE. Volume III, September, 1902. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, pp. 421, 26 illustrations. Philadelphia and New York: Lea Brothers & Co. [Per annum, in four cloth-bound volumes, $10.00. Per volume, $2.50, by express prepaid to any address.]

In this volume we find considered first, diseases of the thorax and its viscera, including the heart, lungs, and bloodvessels, prepared by William Ewart. The material in this section is of the very best on the important diseases which it embraces. Every physician whose practice includes this field should be familiar with the latest thought on the subject, and here it will be found. The next topic is dermatology and syphilis prepared by William S. Gottheil, who has grouped the important advances and novelties in this branch.

The section on diseases of the nervous system which next follows has been arranged by William G. Spiller. It is full of interesting and instructive suggestions, and records the progress that is making in this great subdivision of medicine. In the section of obstetrics, which is the last considered in the book, Richard C. Norris has compassed the entire territory which this branch deals with. Pregnancy, the management of labor, obstetrical surgery, tumors complicating pregnancy, labor obstructed by pelvic deformity, placenta previa, postpartum hemorrhage, the management of puerperium and the care of the newborn infant, have all been discoursed upon, and everything of value discovered in recent literature has been gleaned and stored in these pages. The entire volume is a credit to all who have participated in its proceedings.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VII. Materia Medica and Therapeutics; Preventive Medicine; Climatology; Forensic Medicine. By GEORGE F. BUTLER, Ph. G., M. D., HENRY B. FAVILL, A. B., M. D., NORMAN BRIDGE, A. B., M. D., HAROLD N. MOYER, M. D. 12mo, pp. 277. Chicago: The Year Book Publishers. 1902. [$1 50. Entire series, $7.50.]

In materia medica the newer drugs and remedies are described or referred to in more or less detail, and newer fields of usefulness of older ones are particularly alluded to. Therapeutics is given ample place and much valuable information can be obtained in this book concerning the clinical application of curative resources. These two subjects take up more than half the book.

Preventive medicine has been abstracted to good purpose and the more recent contributions of value noted. The scientific

papers of the year relating to climatology have been condensed and herein noted, and the more salient features, bearing on forensic medicine that the year has evolved have been appropriately referred to. In alluding to the trial of the assassin of President McKinley, which the editor says brought out comparatively little of forensic importance, Dr. J. W. Putnam's statement as to the condition of the prisoner is given, and the editor expresses the opinion that there was nothing to show that the assassin was insane, but ventures the suggestion that he belonged to the degenerate class.

The book contains much of value in the several departments, being well worth its price.

MASSAGE AND THE ORIGINAL SWEDISH MOVEMENTS. Their Application to Various Diseases of the Body. Lectures before the Training Schools for Nurses connected with the Hospital of the University of Pennsylvania, German Hospital and others of Philadelphia. By KURRE W. OSTROM, from the Royal University of Upsala, Sweden. Fifth edition, revised and enlarged; 115 illustrations. Philadelphia: P. Blakiston's Son & Company. 1902. [Price, $1.00 net.]

For the past twelve years this little work has been the standard reference book on the subjects of which it treats. Ostrom is an acknowledged authority upon massage and an instructor of intelligence upon everything relating to it.

The experience which the author has acquired since the first edition was issued, has enabled him to make this one more valuable, so that now it is as near complete as it is possible to make it. It is of value to the physician as well as the nurse, to the masseuse and masseur. New material has been added in each successive edition and the book is without a rival in its special field.

A TEXTBOOK OF PRACTICAL THERAPEUTICS. With especial Reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Ninth edition. Octavo, 851 pages, 105 engravings and four colored plates. Philadelphia and New York: Lea Brothers & Company. 1902. [Cloth, $4.00; leather, $5.00; half-morocco, $5.50 net.]

The editions of this textbook appear in such rapid succession that it causes one to wonder what became of all the books. On a moment's reflection, however, the answer is readily found in the fact that it is just the book the active physician most needs. He generally needs the information he seeks quickly, too, and here he finds it, accessible, clear and adequate. On every occasion we have consulted its pages, and they are many, we have never turned away with disappointment. We have found what we wanted to know and have found it without delay. This means that the book is so well arranged that its contents become readily and easily searched. This, in turn, means a saving of time and a freedom from mental irritation,—both important in these days of work and worry and hurry.

One great advantage in these rapidly appearing editions is the opportunity afforded for revision. The changes in methods of treatment are frequent on account of discoveries that are constantly making in the laboratory and in the clinic room, hence it is important that a treatise like this should keep pace with advances, and record the very latest that scientific research produces. This edition shows a thorough revision of the text, an addition of every new measure of value, and nearly one hundred new illustrations. The prefaces are dated, a convenience which is appreciated by all who wish to trace the editions through their several dates of publication. This must continue to be the textbook *par excellence* of therapeutics.

THE ROLLER BANDAGE. By WILLIAM BARTON HOPKINS, surgeon to Pennsylvania Hospital and to the Orthopedic Hospital and Infirmary for Nervous Diseases. 12mo, pp 178. Fifth edition, revised. Philadelphia: J. B. Lippincott Company. 1902. [Price, $1.50]

To become proficient in the art of bandaging requires much practice; indeed, it may be added that a mechanical aptitude for the work is also needed. A skilful bandager must know where to begin and where to end, how snug to draw, or how loose to lay the bandage. Moreover, the texture of the bandage must be adapted to the particular condition in hand, and the operator must possess expert knowledge as to the precise length and width required therefor. These and many other facts must be compassed by the expert bandager.

In this book, in text and by illustration, almost the last word has been said on the application of the roller bandage to the several parts of the body. It teaches how to prepare it as well as how to apply it, and all that can be learned from a book is most felicitously presented to the student of the subject. The bandages have been applied to a living model and photographs taken during the application at some stage or when completed and from these reproductions the plates for this edition were made. The electrotypes and plates of the preceding edition were destroyed by fire, hence this one has been entirely remodeled and new engravings have been made for it. It is a model of conciseness and perfection.

THE PRACTITIONER'S MANUAL. A Condensed System of General Medical Diagnosis and Treatment. By CHARLES WARRENNE ALLEN, M. D, Consulting Genitourinary Surgeon to the City (Charity) Hospital, Consulting Dermatologist to the Randall's Island Hospital, to the Hackensack Hospital, etc. Octavo, pp. 893. Second edition, revised and enlarged. New York: William Wood & Company. 1902. [Price, muslin, $6.00; half-morocco, $7.00 net.]

The many excellent features of this work have been the subject of discussion heretofore in these columns. It is a book intended chiefly for the "busy practitioner," and in this aim it appears to have hit the mark for the first edition—a large one—has become exhausted in comparatively a short time. The

prefaces are not dated, which is a fashion or a fad to be condemned. Nothing can be gained by such a weak omission except to annoy the reviewer; and we are not sure that this is a gain. However, we find on reference to the indices of the JOURNAL that the first edition was published in 1898 and was noticed in the magazine for February, 1899. What we then said about the book is equally true now, with even more emphasis.

The profession of medicine is over-stocked with annuals, yearbooks, and reference volumes, but this one, constructed on new lines, has a place. It gives the searcher quick information of a reliable and recent kind on subjects of immediate value at the bedside. No physician can carry all the clinical data in his head that are required in his daily rounds attending to an exacting practice, but here he can get information to reinforce at once his stock of knowledge. He can obtain hints upon every subject from "abscesses of the brain" to vertigo,"—the subjects that begin and end the volume. An appendix furnishes a table of equivalents and methods of converting apothecaries' weights and measures into the decimal system. An excellent, comprehensive index closes the book.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by HENRY W. CATTELL, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of John B. Murphy, M D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G. Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London, with Regular Correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume II. Twelfth series. Philadelphia and London: J. B. Lippincott Company. 1902. [Cloth, $2.co each.]

The departments considered in this volume are therapeutics, medicine, surgery, obstetrics and gynecology. In the first there are seven lectures by foreign teachers, to which are added a few pages of selected prescriptions which will prove of benefit to the younger physicians. In the medicine section there are ten lectures by American and foreign teachers, elaborating many important clinical observations not dealt with adequately in the textbooks.

The Surgery section also is replete with valuable thought, though there are in it but five lectures. Obstetrics and gynecology is the weakest section in the book, but that is made up for by other interesting material. A biographical sketch of Dr. John B. Murphy, of Chicago, accompanied by a splendid portrait of this distinguished surgeon will be read with satisfaction by his many admirers, who may here learn important hints as to the conduct of the business side of professional work.

Three special articles follow, one giving an outline of the organisation and work of the medical department of the army, one giving hints upon the management of private hospitals, and another on the function of the digestive glands. The illustrations are better and more numerous than usual.

THE DISEASES OF INFANCY AND CHILDHOOD. For the Use of Students and Practitioners in Medicine. By L. EMMETT HOLT, M. D., LL. D., Professor of Diseases of Children in the College of Physicians and Surgeons (Columbia University), New York; attending Physician to the Babies' and Foundling Hospitals. Octavo, pp. 1178. Illustrated. Second edition, revised and enlarged. New York: D. Appleton & Co. 1902. [Price, cloth, $6.00; half-leather, $6.50.]

When Holt's work first appeared five years ago it at once took rank as one of the leading American textbooks on diseases of children. The second edition has been revised and many of its chapters in part rewritten, much new matter, both in the way of text and illustration being added. In the main the revision has been carefully done. It is regretable, however, that the chapter on infant feeding continues in part an error of the first edition. A colored plate facing p. 163 aims to show in a graphic way the composition of various proprietary foods as compared with woman's milk, the dry foods for purposes of analysis being each mixed with a certain definite proportion of water. It is manifestly unfair to analyse in this way such foods as Mellin's and Imperial granum which are intended to be used with milk and do not, as do the others, contain milk in the dry state. A much more satisfactory analysis of proprietary foods is given in Louis Fischer's recent work on Infant Feeding. M. J. F.

A MANUAL OF INSTRUCTION IN THE PRINCIPLES OF PROMPT AID TO THE INJURED. Including a Chapter on Hygiene and the Drill Regulations for the Hospital Corps, U. S. A. Designed for Military and Civil Use. By ALVAH H. DOTY, M. D., Health Officer of the Port of New York. Fourth edition, revised and enlarged. New York; D. Appleton & Co. 1902.

In these days the laity has been taught much that pertains to early succor in case of injury or sudden illness, the object being a humane one, namely to afford temporary relief pending the arrival of a physician. It is important that such instruction should be based upon sound principles and at the same time be not so technical as to thwart its purpose. Dr. Doty's Manual has done much to reduce this teaching to its proper sphere and this fourth edition gives token of an appreciation of the good work the author is accomplishing. It teaches just enough of anatomy and physiology to ensure an intellignt application of the principles of prompt aid to the injured and distressed, and the text presents so clearly the points sought to be enforced that it makes the book the most approved source of information in its class. It is as important for the nurse, the ambulance officer, the interne, and the emergency physician

as it is for those of the laity who would possess intelligence on this subject with which it deals. Indeed, it is a good book to find in every well regulated household.

A Manual of Otology. By Gorham Bacon, A. M., M. D, Professor of Otology in Cornell University Medical College, New York. With an introductory Chapter by Clarence J. Blake, M. D., Professor of Otology in Harvard Medical School, Boston. New (3d) edition. In one 12mo volume of 437 pages, with 120 engravings and seven plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $2.25 net.]

The third edition of Bacon's Manual leaves little to be desired in such a work. Its arrangement is ideal, the illustrations well chosen and the text unusually clear and concise, the subjects being handled with a practical straight forwardness that is refreshing. The chapter on intracranial complications is a very important feature and one that the student or busy practitioner will find of great value; the idea of including the surrounding parts likely to be affected, is an extremely good one and worthy of emulation. The object of "affording a work of easy reference in lieu of the more exhaustive treatises," is certainly attained; for, with the terseness and directness of a quiz compend, is given the subject-matter of a treatise. L. B., Jr.

Ophthalmic Myology. A Systematic Treatise on the Ocular Muscles. By G. C. Savage, M. D., Professor of Ophthalmology in the Medical Department of Vanderbilt University; Author of "New Truths in Ophthalmology." Duodecimo, pp. 596; 61 illustrative cuts and 6 plates. Nashville, Tenn.: Published by the author. 1902.

Dr. Savage has contributed a valuable addition to ophthalmology, giving a résumé of the best known muscular tests and his experience with their limitations. Old theories are put to a rigid test and shown wherein they are faulty by a series of original investigations.

The first chapter shows earnest work and while there may be some discussion about the axis of rotation the rest of the chapter presents the principles of ocular motions with a conciseness and clearness rarely found in any book of this character.

The articles on orthophoria—the usual type and the asthenic—heterophoria, esophoria, exophoria, hyperophoria, cataphoria and cyclophoria, together with less frequent deviations from the normal have never been presented in any better manner. The tests and their histories are well illustrated and their limitations well described. The only criticism would be the omission of certain points on treatment which were perhaps ignored from lack of space.

Theoretically, presbyopia might be deferred by carrying out the ryhthmic exercise proposed in the last chapter, by means of a weak minus lens; but anything as complicated and tedious as the treatment outlined hardly seems practical. R.H.S.

BOOKS RECEIVED.

Manual of Gynecology by Henry T. Byford, M. D., Professor of Gynecology and Clinical Gynecology in the College of Physicians and Surgeons, Chicago; Professor of Gynecology in the Post-Graduate Medical School and in the Chicago Clinical School. Third revised edition. Duodecimo, pp. 620. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $3.00 net.]

Transactions of the State Medical Society of Wisconsin. Fifty-sixth annual meeting held at Milwaukee, June 4-6, 1902. Charles S. Sheldon, M. D., Secretary.

A Textbook of Anatomy. By American Authors. Edited by Frederic Henry Gerrish, M. D., Professor of Anatomy in the Medical School of Maine, Bowdoin College. Second Edition, thoroughly revised and enlarged. In one imperial octavo volume of 943 pages, with 1003 engravings in black and colors. Philadelphia and New York: Lea Brothers & Co., Publishers. 1902. [Cloth, $6.50 net; leather, $7.50 net; flexible water-proof binding, for use on the dissecting table, $7.00 net.]

A Manual of Surgery: For Students and Practitioners. By William Rose, M.B., B. S., Lond., F. R. C. S.; Professor of Clinical Surgery in King's College, London, and Senior Surgeon to King's College Hospital, and Albert Carless, M. S., Lond., F. R. C. S., Surgeon to King's College Hospital and Teacher of Operative Surgery in King's College, London; Examiner in Surgery to Glasgow University. Fifth edition. Octavo, pp. 1227. Illustrated. New York: William Wood & Company. 1902. [Price, $5.00 net.]

A Guide to the Practical Examination of Urine. For the use of Students and Physicians. By James Tyson, M. D., Professor of Medicine in the University of Pennsylvania, and Physician to the Hospital of the University. Tenth edition, revised and corrected. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $1.50.]

Transactions of the Medical Association of the State of Alabama. Annual meeting held at Birmingham, April 15-18, 1902. G. P. Waller, M. D., Secretary.

The Medical Directory of New York, New Jersey and Connecticut. Published by the New York State Medical, 64 Madison Avenue, New York. Volume IV. 1902–1903.

Blakiston's Quiz Compends. A Compend of Human Physiology. Especially adapted for the use of Medical Students. By Albert P. Brubaker, A. M., M. D., Adjunct Professor of Physiology and Hygiene in the Jefferson Medical College. Eleventh edition, revised and enlarged. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, 80 cents.]

The Medical Epitomé Series. Genitourinary and Venereal Diseases. A Manual for Students and Practitioners. By Louis E. Schmidt, M. Sc., M. D., Associate Professor of Genitourinary Diseases, Chicago Polyclinic. Series edited by V. C. Pedersen, A. M., M. D., Recently assistant demonstrator of Anatomy, College of Physicians and Surgeons, Columbia University, New York. Duodecimo, pp. 249. Illustrated with 21 engravings. Lea Brothers & Co. Philadelphia and New York. 1902.

LITERARY NOTES.

THE *Hot Springs Medical Journal* appeared in September in a new cover which adds much to the appearance of this smart magazine.

THE *Journal of the Michigan State Medical Society* is the name of a journal published in Detroit, Mich., which made its first

appearance in September. It is announced as the official organ of the state and county societies of Michigan and is published monthly under the supervision of the council of the state society. The appearance of the first number is such as to give promise of the success of the magazine.

The *Medico-Legal Bulletin* presented itself in October as the first journal in the world devoted strictly to the interests of the medical profession from a legal viewpoint. It is published monthly by the Physicians' Defense Company, Fort Wayne, Indiana.

MISCELLANY.

Dr. Bissell's Laboratory Course.

Dr. William G. Bissell, pathologist to the department of health, announces that the first session of this year's course in bacteriology will be given in the laboratory of the health department, Tuesday evening, November 3, 1902, at 8.15 p.m. The course will cover a period of six weeks' instruction, two evenings (Tuesday and Friday) each week.

Bacterial diagnosis of pus, sputum, secretions, membranes, gonorrheal discharge, typhoid blood, etc., will be covered, together with the manufacture of culture media, the preparation of cultures, staining of bacteria, and the like.

Those who desire to avail themselves of this opportunity, are requested to communicate with Dr. Bissell at once. Fee, $15 in advance, which covers all expenses.

Dr. John T. Pitkin, of Buffalo, announces that he has installed at his Ellicott Square office the actinolite or Finsen apparatus.

The Arlington Chemical Company, of Yonkers, has published in pamphlet form a series of short lectures by Rev. Andrew F. Underhill, rector of St. John's Episcopal Church, of Yonkers, N. Y., entitled, Valid objections to so-called christian science. This handsome brochure is being addressed to all physicians. If any of our readers have been overlooked in the mailing, a request to the above-mentioned Company will bring a copy.

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ORIGINAL COMMUNICATIONS.

The Surgical Specialty.[1]

BY A. L. BEAHAN, M. D., Canandaigua, N. Y.

SINCE Lister promulgated his doctrine of antiseptic treatment of wounds, surgery has been revolutionised. In the past thirty-seven years his teachings have been followed with such success that surgery as a specialty has been placed upon a solid basis, and the truths then enunciated have become classical. The principle of thorough cleanliness, with the prevention of wound contamination by proper antiseptics and exclusion of particles from the air that prevent by their development and consequent healing of wounds and restoration to normal conditions of the cavities of the body, has been brought forward to a scientific position, precise and unassailable.

The work of Tait in abdominal surgery gave a technique of matchless character and results that astonished the world. The principles evolved taught us much of new value in all lines of surgical success. His was the master mind. He not only marked out new paths with originality and force, but of the varied procedures and from different methods he sifted out the best plans and adopted the safest and most successful courses to pursue. If the one fallacy, the opium treatment of peritonitis, the Meigs method, had he only and alone exploded, his name were written high up on the monument of the world's benefactors. But in the matter of drainage of wounds, a principle of Lister's and founded on the necessity for preventing accumulations and elaboration of morbid products, Tait established and popularised a principle that stands the severe test of experience

1. President's address delivered before the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N.Y., October 21, 1902.

and after much wandering of recent pathological thought, a gradual strengthening of this truth is felt.

It is a comfort to feel that confidence in unchanging principles is unshaken; that a difference in technique is a difference of detail only. Cleanliness and simplicity should be sought for first, last and always in the province of surgery. To invent a new instrument is not so important as to make an old one do more work. The man who cannot be a surgeon with a jackknife can never be a surgeon. The surgical specialty as a topic should deal more with men and their work in this department of medicine rather than measures and principles. It may be fairly stated that surgical work is being widely disseminated. It is not controlled by colleges, nor by the hospital staffs. After a stress period of ovarian operations came appendiceal, next kidney and gall-bladder surgery claimed attention.

The old dictum that a long service in medicine should precede the choosing of any specialty, was in part wise, but it does not hold as true with a four years' course of study as it did with two courses of five months each. Surgical work is now in the hands of the many and it will so continue. It is safest when so adjusted. The education of the people on true scientific surgical lines is growing. Their appreciation of fine discrimination is acute. Who has not had children make the diagnosis of appendicitis in their own cases? What physician dare say to his patrons, "Your kinsman or friend died of peritonitis," without making an explanation of its cause? No doubt the rapid advancement of surgical knowledge and the fascination of its successful features in attracting so large a number of operators may have given the aggregate of individual records an increase of failures, compared to what successes might be recorded if the greater operators could have corralled and controlled the whole of the clinical material. But excesses always correct themselves and the intensities and vital forces that with strenuous energy work out new problems can be trusted to finally subside to normal limits.

It is growing to be a question, if, on surgical lines, one can afford to exploit a moderate talent in a limited field. Surgery is often the final spasm of effort in a forlorn hope and it weighs on the consciences of pursuers of the healing art and provokes fierce criticisms by the laity when failure occurs. But when the operators of any hospital for any month nearly equal the number of operations, it is a question whether dissemina-

tion of surgical science has not reached its limit. The effect of this democratic plan of rendering available for all aspirants to surgical honor or emolument, the hospital service and equipment has features worth further studying. If infection occurs and spreads, to trace its source, if from without the institution, becomes impossible. Because of general permission without supervision or responsibility, incompetency is not excluded, nor controlled. The private patient suffers most, the ward patient least, because the latter must be served by one of the staff. But no one of the several attending surgeons gains sufficient patronage to develop a clinic of such importance that the education of the profession is advanced.

The pushing, pressing, over-crowded profession of medicine and surgery develops in the individual member the desire for fame and a procedure or an instrument is labeled with the name of its user or inventor and "my" or "mine" becomes greater than the greatest. Simple technique is abandoned for complex, common plans for complicated, the new way for the old. Of instruments there is no end. What may be needed is asked on planning for an operation, not what is required, what indispensable. Take the needle alone as an illustration. The scythe-like Hagadorn, cutting a swath of cradle-like proportions. The Peaslee, a threaded push and pulling lacerating grotesque instrument. The Glover, where the point is larger than the body and the cutting edges extend half way back to the hilt, causing a puncture and incision that altogether would carry several times as much thread as the needle holds. Each of these or their similars, as given us by the manufacturers, should be discarded either because of their uselessness or bad construction, or because they are needless profusions of our armamentarium. The history of surgery shows repetitions of principles, but few new discoveries. Each operation exhausts itself, giving way to some other popular work. Careful observation is needed to not follow will o' the wisps in surgery.

It is doubtful if Emmet's trachelorrhaphies and perineorrhaphies, Bantock's suprapubic serreneud extraperitoneal amputations and stump treatments of uterine fibroids; Buck's extension for fracture of the femur; Moore's method in Colles's fracture, reduction and treatment; Mayo Robson's technique in gall-bladder operations will ever be successfully improved.

It is not very wise to rush after confusing and diverting and really unimportant changes in technique. "I have an operation

of my own" is an exclamation tiresome, vain and contains a false note that grates the ear or palls the taste. "Medicine is a science, surgery a divine art," exclaimed a reader at the American Medical Association, at the Denver meeting. "Jesus Christ and I cure," said Dr. Dick Levis, years since in a public address. What magnifying of human powers, what blasphemy! True conservatism does not hesitate, but is never bold; does not assume to possess unwarranted ability nor scope, but in humble, patient, conscientious labor works out true scientific results; does not play to the galleries, but points out with honest thought the hard and fast principles of the thorny road to successful achievement or possible, but honorable, defeat. Dr. McMurtry at a section dinner at Atlantic City, at a meeting of the American Medical Association, stated that he sincerely pitied the abdominal surgeon in his first hundred cases; that no other work in the world was so intense. The door bell at night caused the cold perspiration to start over the whole body. The nerve tension was frightful.

The surgical specialty comprises no smooth road, conduces to no peace of mind. No drone, no dullard can succeed in it, nor should. The warp, the woof, the finished product must absorb the whole of the mentality, be the consecration of the complete, full-fledged faculties. The finger tips need supersensitiveness; the mind must not be diverted: a medical man, the husband of a patient on whom Tait was operating for ovarian disease asked Tait a question during the course of the operation. The knife went wrong and the patient nearly lost her life from the hemorrhage of a cut artery.

The gratifications of success, not the mercenary end must be the payment for much of service. Surgery is a necessity, not as medicine, a choice. It must face consequences, as of maiming for life, or causing untold suffering. The die is surely cast when the operation is completed. It is either weal or woe. There can be no checking, no hedging. The responsibility has no parallel, because of its intensity, in the purely medical branch of service. Self-limitation does not enter into the calculation when the knife cures. Principles must not be broken. The steady hand, the clear brain, the correct eye, the balanced judgment, trained for wise comprehension and acute action must be alert and ready. The work of the moment transcends in importance everything else in the world and absorbs every thought and emotion of being. The achievements

of American surgeons and the status of the surgical specialty in our own country are very important. Anglo-Saxon courage, resource and ability have written many new chapters in surgical progress. Genius, invention, quick application and clearness of discrimination may be claimed as our characteristics. The universality of education, the wide-spread distribution of journals and books, the establishment and strong support of societies for fostering research, comparison of work, mutual benefit and social intercourse, make American medicine in all its branches progressive and of virile power.

The history of this society demonstrates the increased usefulness of such organisations in its increased membership and interest in meetings. Since we last met the first president of this society, in 1868, Dr. Edward Mott Moore, of Rochester, has died. He was at once the dean and patriarch of medicine in the section and boundaries represented here. In original research, love of his profession, its literature, and practice, helpfulness to fellow-workers, breadth of character, purity of life, tenacity of purpose, Dr. Moore's record stands high. His reputation became world-wide when the first correct interpretation and treatment of Colles's fracture was by him properly made.

It is recommended that suitable resolutions be presented at this time, commemorative and expressive of the regard of this society for Dr. Moore.

A new feature has been added to this present meeting, a banquet. It is the belief of your officers that this feature, by merging social with literary elements, will strengthen the society.

Thanking you for the honor of being permitted to preside over your deliberations, it is my pleasure to declare this, the thirty-fifth annual meeting of the Medical Association of Central New York, open for such business as you its members may transact and to invite your attention to the program offered.

The Diet of the Asthmatic.[1]

GEORGE N. JACK, M. D., Depew, N. Y.

IT WOULD be an imprudent adventure to construct or to attempt to construct a fixed or set diet for all or any class of asthmatics, for such a barbarous document would be an instrument of torture to persons so suffering and a serious handicap to

1. Read before the Lake Keuka Medical and Surgical Association, August 19-20, 1902.

the physician. A properly selected individualised, progressive and varying diet is of so great importance to the asthmatic that on its proper selection and individualisation hinges the success of the treatment. The diet of the asthmatic, then, becomes a daily problem, the solution of which requires a preliminary education in asthmatic mathematics which would constitute a thorough, accurate and individualised knowledge of the asthmatic's metabolic peculiarities together with an experienced and often proven understanding of the action of foods under these perverted digestive algebraic equations.

The importance of a properly selected, varying and individualised diet in the treatment of the asthmatic lies in the following facts: (1) the blood dyscrasias producing the disease are with but few exceptions of an alimentary digestive and blood metabolic origin; (2) the blood is the medium through which all absorbed foods undergo their final digestive or chemical metabolic preparations; (3) all fat food products, after their absorption by the lacteals, travel in all a distance of only about twenty-seven inches, through the thoracic duct, left innominate, superior vena cava, right heart and pulmonary arteries, direct to the lungs for oxygenation, separation and classification before passing through any important digestive organ for modification; (4) all the other food products as proteids, are taken up directly by the blood through the portal circulation, which after passing through the liver, for modification, immediately reach the lungs for further important, chemical metabolic preparations; (5) the lungs, then, are not only oxygenating organs as heretofore supposed, but they are blood, lymph, food and serum, sifting and classifying organs as well, which permit the blood to enter them as thick, dark, sluggish, venous blood, and to leave them as thin, scarlet, active arterial blood, thus rendering digestion and oxygenation co-partners.

These facts together with the determinable metabolic perversions, as demonstrated by an analysis of the blood, stool, urine and sputum, together with the individual, physical peculiarities of the case, may be regarded as the known or given factors in the asthmatics algebraic dietetic equation to determine the unknown factor or the quantity and quality of food. As one factor in the problem, the individual digestive metabolism is of a varying, and if successful, a progressive scale, the digestive problem necessitates a tentative answer and a frequent solution. Among the numerous difficulties met with in prescribing a diet

for the asthmatic, the following are enumerated: (1) it is a serious disease and one that is ever on the borderland of a leukemia, a pernicious anemia, a cerebral hemorrhage, or a hemorrhagic condition of the mucous membranes of the entire respiratory tract; (2) on account of these vicious, progressive tendencies a diet must as rapidly as possible be advanced to that which will replace the waste of the disease and prevent intestinal fermentation and putrefaction; (3) the diet must also be of such a nature that it will not after absorption readily undergo perverted chemical metabolic changes in the blood; (4) a diet must in each case eventually be established that can be persisted in for many years; (5) the agony and torture of the disease render all asthmatics extremists, to such an extent, that if a certain food or diet gives them relief from their dyspnea they will exclusively exist upon it regardless of the otherwise serious results; (6) the misery of the disease together with its heretofore hopeless outlook and a nervous system that is nourished with an impoverished blood, renders the asthmatic a fit subject for a degree of melancholy that beggars description; (7) these depressed spirits materially interfere with the digestive function; (8) the severity of all cases of asthma is increased by prolonged mental depression or great anxiety, or other strenuous and not exhilarating mental states. For obvious reasons these difficulties are rendered much less formidable if not entirely subdued by keeping the patient for the first few weeks at a well conducted institute.

THE ASTHMATIC LYMPHOCYTOSIS.

The diet of these little sufferers is extremely hard to determine and regulate. However, as most of my cases have arisen from fat breast-fed infants, whose mothers furnished them abundant rich milk, it would indicate that overfeeding with a readily absorbable milk, rich in lymphocytic elements, is the most frequent cause. A few cases taken from my records substantiate this opinion, and as these cases best illustrate the relation between diet, metabolism, blood and asthma, they will here be quoted. I will ask you take these blood counts with a great many "abouts," "question marks" and approximations, but as they with the clinical features of the case have served to convince me, it is hoped that they may be of practical use to you.

Case.	Age.	Duration of Disease.	Leucocytes.	Polymorphonuclear neutrophiles.	Small lymphocytes.	Large lymphocytes.	Eosinophiles.	Diet.	Character of Stools.	Results.	Remarks.
No. 1.	3 weeks.	2 days.	92,700	30 per cent.	63 per cent.	5 per cent.	2 per cent.	Breast.	Soft, yellow, musty odor.	Dyspnea, cyanosis.	Fat infant; mother a profuse rich milker.
"		5 days.	55,000	40 per cent.	43 per cent.	19 per cent.	1 per cent.	Water, beef juice, barley flour, and butter.	Dark, mucus, putrid odor.	Dyspnea improved	Less mucus in respiratory apparatus.
"		10 days.	36,500	45 per cent.	36 per cent.	18 per cent.	5 per cent.	Same, with little breast.	Pasty, light green.	No dyspnea.	Infant was gradually put back to breast.
"	3 months.	2½ m'ths	90,500	29 per cent.	64 per cent.	6 per cent.	1 per cent.	Breast.	Hard.	Suffocation.	Respiratory apparatus completely clogged with mucus; no autopsy; fat at death.
No. 2.	5 months.	3 days	32,300	57 per cent.	30 per cent.	10 per cent.	3 per cent.	Breast.	Soft, yellow, offensive.	Dyspnea.	Fat infant; mother large and healthy.
"		5 days	21,400	62 per cent.	25 per cent.	8 per cent.	2 per cent.	Water and pano-pepton.	Semifluid, mucus, green.	Dyspnea improved	Breast gradually resumed.
"		10 days	15,600	50 per cent.	25 per cent.	7 per cent.	5 per cent.	Breast and barley water.	Soft and frequent.	No dyspnea.	Put back on breast alone.
"	8 months.	3 months	10,000	40 per cent.	35 per cent.	15 per cent.	8 per cent.	Breast.	Variable.	Dyspnea mild and by spells.	Infant fat but somewhat flabby muscled.
No. 3.	6 months.	5 days	43,000	32 per cent.	50 per cent.	20 per cent.	3 per cent.	Breast.	Soft, blood and mucus, some curds.	Dyspnea.	Infant rather poor and anemic; inherited tendency to asthma from father; mother thin and spare and a poor milker.
"		8 days	35,000	41 per cent.	43 per cent.	21 per cent.	4 per cent.	Water, beef juice and breast.	Greenish, streaked with blood, mucus.	Dyspnea improved	Marked evidence of malnutrition.
"		18 days	17,000	63 per cent.	26 per cent.	9 per cent.	8 per cent.	Breast 5 minutes, barley water and beef juice, butter and orange juice.	Improved.	But little dyspnea.	Infant extremely nervous and irritable, from starved nerves.
"	9 months.	3 months	10,000	60 per cent.	23 per cent.	15 per cent.	5 per cent.	Same, with addition of beef, minced fine.	About normal.	But little dyspnea, by spells only.	Infant begins to thrive, less anemic, and appears more robust in every way.

Case.	Age.	Duration of Disease.	Leucocytes.	Polymorphonuclear neutrophiles.	Small lymphocytes.	Large lymphocytes.	Eosinophiles.	Diet.	Character of Stools.	Results.	Remarks.
No 4.	4½ m'ths.	4 days	90,000	20 per cent.	64 per cent.	15 per cent.	3 per cent.	Breast, mother had never given infant any water.	Soft and offensive.	Dyspnea and cyanosis.	Severe case; an exceedingly fat infant; mother a profuse milker; nose and throat examined by Dr. Cott and found to be in a normal condition.
"		7 days	70,000	25 per cent.	60 per cent.	18 per cent.	5 per cent.	Water, with little beef juice and butter.	Semifluid, mucus and cadaveric.	Dyspnea improved	Infant had a frequent cough and with each cough mucus would pour from mouth.
"		17 days	20,000	31 per cent.	40 per cent.	15 per cent.	8 per cent.	Breast and barley water, orange juice and butter.	Variable.	Dyspnea at night.	Infant becoming anemic and flabby muscled.
"	8 months	5 months	87,000	23 per cent.	67 per cent.	20 per cent.	7 per cent.	Breast.	?	Cyanosis, dyspnea and suffocation.	Infant had not been seen for the last four months, but it was still exceedingly fat, and mother states that it had fairly good health during absence, and that the last attack came on suddenly; no autopsy.

These records and my observations indicate that bottle-fed infants are not so susceptible to the lymphocytic asthma as the breast-fed infants, owing presumably to a slower absorption and assimilation. But, on the contrary, the bottle-fed infant is more susceptible to the toxic lympho-anemic variety during the second year and early childhood. However, if the case be that of a fat breast-fed infant with alarming cyanotic attacks of increasing severity, it is advisable to completely or partially substitute the bottle for the breast.

THE ASTHMATIC TOXIC LEUKOCYTOSIS.

Under this class we have a somewhat different dietetic problem to solve. Patients of this class usually have passed the constructing metabolic or "growing period" and have attained early adult life where there is a less urgent demand upon their metabolism. The intestinal toxemia, as a rule, is well-established, and the poisonous gases and other toxins absorbed by the blood from this source have long interfered with the blood's physiologico-chemical functions. To save time and endeavor to keep within the fifteen-minute limit, the foods that may singly or conjointly be tried in this class according to the condition of the blood, stool, and urine will here be mentioned.

These foods are: water, milk, butter, oranges, berries, pie-plant, lemons, sour cherries—all without sugar—young onions, celery, graham or almond bread, meats of all kinds fresh, except lean pork, fresh fish, spinach, tomatoes, cauliflower, endives, sorel, cucumbers, vinegar pickles, lettuce with vinegar and olive oil, radishes, dandelions, leeks, sprouts, asparagus, cheese and eggs. These foods in the dietetic problem may be regarded as the ten characters or figures employed in arithmetic to express numbers; and like these figures when used independently they can express only the character of the material to select from, but when combined or used according to certain principles they serve to express all. As the student in mathematics may think after learning the ten characters that he has mastered his subject, but the old mathematician that has devoted years to the subject and failed on many a problem, and realises that he may fail again, will take a different view, so here while these may be the proper foods to use yet it is their singling out, combination or suspension, according to the condition of the blood or intestinal digestion, that achieves success.

The stool, blood and urine, as well as the weight, thrift and well-being of the patient must be constantly watched. In observing the effects of a prescribed diet we must ever bear in mind that food, after it enters the mouth, has alimentary digestion, blood digestion and metabolism to contend with before it maketh a man. The stool is our best indicator of the alimentary digestion, and the urine and blood, for blood digestion and metabolism.

With all that has been said and done in regard to the chemical and microscopical analyses of feces, these analyses are of but very little practical clinical value, for a sniff, a look, a poke, litmus paper and a sieve, with a fresh stool will reveal more of practical value to the experienced observer in a few minutes time than will hours or days in a laboratory with an old stool, a microscope and chemical reagents. The reason that this is so is that the normal, healthy, go-lucky, hearty feeder with a vigorous blood and a healthy active intestine will ingest food in qualities and quantities desired, and the blood will take up what it requires while the intestine will uncomplainingly dump the rest. The chemical and microscopical analyses of these normal stools would at times give us fats, starch, beef-steak, albumoses, peptones, carbohydrates, cherry pits, and almost anything that we were searching for, while the producer of these stools would be jollying his time away never knowing a sick moment with fair prospects of vigorously tiding the five-score mark. But the things that are of practical value pertaining to the stool of the asthmatic are its odor, color, consistency, frequency, reaction and sieved out residue.

The vicious circle of nearly all varieties of asthma originate in the intestinal canal, therefore a constant observation of the stool is of the utmost importance in prescribing a diet. And of all practical tests the odor with the re-action is of the most significance. If the stool becomes acid, fermentative, with a sour penetrating odor, it is a warning to withhold all food but water for a time, and then to cut down or change the carbohydrates. Then, again, if the stool becomes alkaline, with a cadaveric, nauseating odor, it is another warning to withhold all foods but water and to diminish the meat foods. As a rule, animal foods are most apt to undergo deleterious changes in the intestine, but do more readily enter into the stable and desirous compounds in the blood, while, on the other hand, the vegetable foods or carbohydrates are less apt to undergo harmful changes

in the intestine, but are more apt to undergo detrimental changes in the blood.

If after meals the blood shows a marked leukocytosis far exceeding the normal digestion leukocytosis, then meat must be interdicted or diminished. But if the blood shows a pronounced iodophilia, denoting an amyloid degeneration, with an abundant outpouring of a thick, sticky, amyloid sputum, then carbohydrates or foods rich in starch must be interdicted. In some cases where the blood becomes decidedly amyloid, sugar can be detected in the urine. Dr. Cott, of Buffalo, recently sent me a case of this class. He was a thin, emaciated youth of 24 years, who had had asthma for twenty-two years. On an analysis of the blood it was found decidedly amyloid, with 30 per cent. hemoglobin. The urine showed a specific gravity of 1030, with a trace of sugar.

THE ASTHMATIC ANEMATOSIS.

Here the main object is to feed up with a progressive diet and to give as much fresh, bloody meat and raw eggs as the digestion will tolerate and take care of.

CONCLUSIONS.

If on a differential count the blood shows a high percentage of small lymphocytes milk should be diminished or withheld. An abnormal increase in the polymorpho-nuclear neutrophilic cells indicates an intestinal toxemia and putrefaction which suggests the withholding of meat foods. A pronounced iodophilia indicates an amyloid or starchy degeneration of blood and suggests the withholding of foods rich in starch. A thin, watery blood with a deficient plasma and a red corpuscle poor in hemoglobin and deficient in biomagnetism, as shown by the lack of ruloux formation and the scattering of the red blood corpuscles about the field, indicates the giving of fresh bloody meat, raw eggs and green vegetables rich in chlorophill and protoplasm.

Infant Feeding.[1]

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BY FAR the most important subject in pediatrics today, is that relating to the feeding of infants. Without proper nourishment, not only is the infantile mortality greatly increased, but should it escape the ravages of death its whole life, character

1. Read before the Buffalo Academy of Medicine, October 28, 1902.

and physical being may be entirely changed. The importance of infant-feeding is exemplified by the great number of baby foods on the market—all lauded by the manufacturers to be equal to or even better than the breast milk, but none proving by the test of experience to be in any way ideal or meet the requirements of the nursing babe. It is true that some babes will exist on these foods and a few apparently thrive; but a far greater percentage will develop marasmus, rachitis, scurvy and improper development of teeth and bone; besides the various gastrointestinal disturbances.

The number and variety of baby foods on the market, are like the remedies recommended in diseases for which there is no specific—innumerable—a most excellent proof that none are ideal or meet the requirements in a majority of cases.

As an infant is fed usually in one of three ways, I have made three classifications of infant feeding, viz: (1) from the maternal breast; (2) by a wet nurse; (3) from the bottle, or what is sometimes called artificial or hand-feeding. A fourth might be mentioned, called mixed feeding—partly from the breast and bottle. Other methods are and have been used.

Ancient history tells us that Romulus and Remus were nursed from the breast of a she wolf. It is also reported in medical literature, that the male breasts have been known to develop sufficiently to secrete enough milk for the nourishment of the infant. Of these unusual varieties of feeding, I shall not discuss.

The best and most natural method of feeding infants is from the maternal breast; but this unfortunately cannot always be resorted to. The social conditions of the mother may be such that she cannot or will not nurse her babe. The mother who depends on her own livelihood for the support of herself and family, would find it out of the question to nurse her babe; and the society woman finds it also, in her way of thinking, out of the question to nurse her new-born. Or, again, the quantity of the mother's milk may be so deficient that she is compelled to resort to other modes of feeding; again, the quality of the milk—which is rare—may be such that the baby is in constant torment from the cramps or colic produced by it. In such cases, other modes of feeding should be resorted to.

In maternal feeding, the points of importance are, when the milk is of the proper quality and quantity, the length of the interval between feedings, and the length of time the baby

should be permitted to nurse at the breast. No iron clad rules can be laid down for all cases; but, as a general rule, the babe should be put to the breast as soon as the mother is over the fatigue of labor—four to eight hours after birth. For the first three days, or until the breasts fill, the interval should be every four hours, alternately with each breast. It would be worse than useless to nurse oftener at this time, as the breasts contain no milk, and but a small quantity of colostrum, and more frequent nursing at the start is apt to cause sore nipples and dire consequences may result therefrom. After three or four days, when the milk is secreted in sufficient quantity, it may be put to the breasts every two hours, from 7 a.m. to 10 p.m., with two nursings through the night. This is to be continued until the baby is six weeks old, when feedings should be lengthened to every two and one-half hours, with one night feeding, until the fourth month; then every three hours, with one night feeding, and after the fifth month, no night nursing whatsoever. It is important that the babe be awakened at its regular feeding time during the day to nurse, that it may form correct habits and thus prevent indigestion from over distention of the stomach. The nipples should be washed with a saturated solution of borax water or boracic acid solution, before and after nursing, thus preventing, to a large extent, both sore nipples and the common forms of stomatitis.

No. 2, or wet-nursing, I shall dispose of in a few words. If the wet nurse be physically, mentally and morally qualified and her milk is of the proper quantity and quality, and expense no consideration, then, of course, a wet nurse should be preferred next to the maternal breast; but these qualities are rarely attained in a wet nurse. If her physical condition be correct and she is free from syphilis, tuberculosis or any other transmittible or infectious disease, her morals may be such that it would be unwise for her to have the care of a young infant, which she would necessarily be obliged to have more or less. Masturbation is frequently taught the infant by the wet nurse, either by her depraved nature or from her desire to appease a crying infant. Her physical and moral conditions may be all right and her personal appearance or conditions such as filthiness in habits, slovenliness or ugly features should disqualify her. All these may be correct and the secretion of her milk will be made variable in quantity and quality in many cases, from her remorse over the conditions which caused her to become a wet nurse, or

the worry caused by her own infant being deprived of its mother's milk. These factors all cause a disturbance, both in the quantity and quality of the milk and affect the digestion of the infant in a like degree. There are scores of other things not here mentioned, to disqualify a wet nurse. Mixed feeding may be resorted to when the mother's milk is deficient in quantity or to relieve the mother of night nursing, and with the most happy and beneficial results, both to the mother and infant.

The method of feeding which is of most importance to the infant deprived of breast milk and the one which requires of us, as physicians, the greatest amount of study, care and skill, is artificial or bottle-feeding, sometimes called hand-feeding. In No. 3, or artificial feeding, there are several fundamental principles which must be constantly borne in mind: (1) the food must contain the same constituents as found in woman's milk, viz.: fats, sugars, proteids and inorganic salts; (2) these constituents must be present in about the same proportion as found in good healthy woman's milk; (3) as nearly as possible, the different constituents should resemble woman's milk, both as to chemical composition and their behavior to the digestive fluids.

How decided is the difference in the action of pepsin in the proteids of cow's milk and that of human milk; in the one, the curd is a thick, rubbery, tenacious substance; in the other, a light, thin, flocculent curd. The properties of human milk are not found in any of the shop foods. Human milk is composed of 13 parts solids and 87 parts water. The solids are the fats, sugars, proteids and inorganic salts. The sugar or carbohydrates is lactose or sugar of milk. The proteids or albumenoids are the curd. The cream is the fat or the hydrocarbons. These elements are all essential for the growth of the various organs, bones, nerves, fat of the body and for the production of heat. The sugar is needed for the production of heat and making fat; proteids are needed for the growth of the cells of the body, such as those of the blood and various organs and muscles. The fats are needed for the growth of bone, nerves, fat of body and production of heat. The salts are required for bone construction.

There are many substitutes for human milk sold in the stores, but the only substitute which I shall consider, is a properly modified cow's milk. I mean by the modification of cow's milk, the changing of the proportions of the different ingredients until

they resemble human milk, the important changes required being to diminish the proteids and increase the sugar. The essentials of a cow's milk used in infant-feeding are, that it shall be fresh, clean and from healthy cows. It is better to have the milk from a herd than from a single cow, as the milk from a single cow varies from day to day, while that from a herd remains practically the same. There are now in most every large city of the United States, laboratories for the modification of cow's milk on physicians' prescriptions. On account of the expense, people with moderate means are unable to use it. For this class of people, I recommend the home modification of cow's milk, and with this method I have fully as good results when the modification is properly carried out. It can be done by anyone with ordinary intelligence, when properly instructed. The milk of the cow, ewe, goat, mare and ass, contain the same ingredients practically, as found in human milk, but differ as to the proportion of their constituents. The milk of the mare and ass most nearly correspond to human milk of any of the mammals, but on account of the difficulty in obtaining it, it is rarely used. Cow's milk being the most available, is the one used most commonly as a substitute for human milk.

The principal reason for modifying cow's milk are because it contains about three times as much proteids or curd as human milk, and only about one-half the amount of sugar; besides the digestive fluids of the infant produce vastly different effects on the proteids of cow's and human milk. The one is made into a tough and tenacious curd, while the other is made into a light and flocculent curd. Furthermore, the reaction of human milk is always alkaline, while that of cow's milk is persistently acid.

The following comparative table of human and cow's milk, shows the reasons for modification.

	HUMAN MILK.	COW'S MILK.
Reaction	Alkaline	Acid
Specific Gravity	1,031	1,029
Fats	4 per cent.	4 per cent.
Sugars	7 per cent.	4.3 per cent.
Proteids	1½ per cent.	4 per cent.
Salts	0.2 per cent.	0.7 per cent.
Water	87 30 per cent.	87 per cent.
Bacteria	Usually none	Always more or less persistent.

The fats are the only ingredients which are alike. The proteids must be greatly reduced, the sugars increased, the salts reduced, the acidity overcome, and as far as possible, the bacteria

destroyed. The proteids may be diminished by diluting the milk according to the age of the child. To give the proper proportion of proteids, cow's milk should be diluted for an infant under two weeks, five times; from 2 to 6 weeks, four times; from 6 to 12 weeks, three times; from 12 to 16 weeks, one and one-half times; from 16 to 40 weeks, once; and a baby one year old, usually not at all.

I have devised a table, modified from Holt, of five formulæ, showing the ingredients, administration and preparation of modified milk for infant feeding, from birth to 10 months, as follows:

	FORMULÆ.	I.	II.	III.	IV.	V.
	Age	3 to 14 days.	2 to 6 weeks.	6 to 12 weeks.	12 to 20 weeks.	5 to 10 months
Ingredients.	Milk	1½ oz.	3 oz.	4 oz.	10 oz.	15¾ oz.
	Cream	1½ oz.	3 oz.	4 oz.	4 oz.	5¼ oz.
	Milk-sugar	1¼ oz.	1¾ oz.	2 oz.	2¼ oz.	2¾ oz.
	Lime water	1½ oz.	1½ oz.	1½ oz.	1½ oz.	2 oz.
	Water	15½ oz.	20½ oz.	22½ oz.	19½ oz.	19 oz.
Preparation and Administration.	Amount at each feeding	1-2½ oz.	2-3¼ oz.	3-4½ oz.	4-6 oz.	5-8 oz.
	Interval between feedings	2 hours.	2 hours.	2½ hrs.	3 hours.	3 hours.
	Number of feedings in 24 hours	10	9	8	7	6
	Number of night feedings from 10 p.m. to 7 a.m.	2	2	1	1	0
	Amount for 24 hours	10-25 oz	20-32 oz.	24-36 oz.	28-42 oz.	30-48 oz.
	Number of dilutions of milk top	5 times. 12 %	4 times. 12 %	3 times 12 %	1½ times 9 %	once 8 %

NOTE—Twelve per cent. top milk is the upper 1-5 of milk, which has stood in a cool place for 5 hours; 9 per cent., the upper 1-4; 8 per cent., the upper 1-3. Top milk is equal to the milk and cream combined, in the above formulæ.

PREPARATION—Syphon the milk from the bottom of the bottle after it has stood on ice, or in a cool place, for from 4 to 5 hours, until 1-5 remains; take of this the amount required for 24 hours and add to the sugar of milk solution, which is made by adding the required amount of sugar of milk to boiling water. Add the lime water last. Next pour the amount of one feeding into each of the feeding bottles required for 24 hours; put stoppers in loosely and pasteurise for half hour. After pasteurising, push stoppers in well and cool by placing bottles, first, in tepid water, then, in very cold water, after which put in a cool place.

On account of the greater indigestible qualities of the curd, in cow's milk, it must be reduced far below that of human milk,

as the table will show. Instead of reducing the proteids to 1½ per cent., the percentage in human milk, for an infant from 2 to 14 days, it must be reduced to 6-10 per cent. and in some cases still more, and as the infant becomes accustomed to it, it can be gradually increased. Not until the babe is 12 weeks old, is it able to digest the curd in cow's milk, at the same percentage found in human milk, 1½ per cent., the curd of cow's milk being so much more difficult to digest. In some instances, I have been obliged to remove it altogether and make a mixture of whey and cream. The curd is easily separated from the milk by the use of pepsin (Fairchild's), about one dram to a pint. The whey and cream are then used for feeding. The quantity of sugar of milk used in whey and cream is only about one-half as much, because in using the whey, the greater percentage of sugars is retained and only the difference between that of cow's and human milk is to be added. In order then to modify cow's milk, we must have milk, cream, sugar of milk, lime water and water. It is essential that the cream and milk be fresh and not older than from 12 to 18 hours. Unless you are able to obtain centrifuged cream, it is better to use what is termed by Holt, "top milk." Instead of using 1½ ounces each of cream and milk, as in formula No. 1, you may use 3 ounces of 12 per cent. top milk. The upper 1-5 of the bottle of milk, standing in a cool place for five hours, will contain 12 per cent. butter fat and 3 per cent. curd. This is called 12 per cent. top milk, and by diluting this 5 times, the fats and proteids will be in about the right proportion for an infant up to two weeks. Sugar of milk is added to the extent of 6 per cent. until three months old, then it is made 7 per cent. The quantity of sugar of milk that is already present in the diluted cow's milk can be disregarded in figuring the percentage of milk sugar up to 12 weeks. From birth to 12 weeks, a top milk of 12 per cent. fat and 3 per cent. proteids is used, as the base for modifying the milk. This as before stated, is obtained by letting the milk stand in a cool place, either in a milk bottle or a fruit jar for 5 hours. The upper 1-5 will then represent 12 per cent. fat and 3 per cent. proteids. By siphoning the lower 4-5, the remainder (12 per cent. top milk) is to be used as the base for modification. By diluting this 5 times with boiling water, you will have a 6-10 per cent. proteids and 2 per cent. fat, and then adding 6 per cent. sugar of milk and 5 per cent. lime water, you will have formula No. 1.

Formula No. 2, is made exactly in the same manner, except the top milk is diluted 4 times instead of 5. This formula then represents 8-10 per cent. proteids, 2½ per cent. fats, 5 per cent. alkalinity or lime water, and 6 per cent. sugar of milk. Formula 3 is made by diluting three times. This formula represents 1 per cent. proteids, 3 per cent. fats and 5 per cent. alkalinity, and 6 per cent. sugar of milk. Formula 4 is obtained by using a 9 per cent. top milk, which is obtained by taking the upper ¼ of the bottle of milk, after standing in a cool place for 5 hours. By diluting this 1½ times, there will be produced a 1½ per cent. proteids, 3½ per cent. fats and to this is added 7 per cent. sugar of milk and 5 per cent. lime water. Formula 5 is made by using a 8 per cent. top milk, which is obtained by using the upper 1-3 of the bottle of milk, after standing in a cool place 5 hours, and then diluting with an equal amount of boiling water, and then adding 7 per cent. sugar of milk.

These formulæ provide for the infant to a time when an exclusively milk diet is no longer demanded and to when it can usually take cow's milk undiluted. These formulæ may be modified by the substitution of a thoroughly cooked, thin oatmeal water, in place of the plain water, should the infant be suffering from constipation; or a thoroughly cooked barley water may be substituted for the plain water in case the stools are too loose or frequent.

The paraphernalia required for modifying cow's milk are as many nursing bottles as there are feedings in twenty-four hours, nipples and a quart measure as tall as the nursing bottle for heating the milk, a glass syphon, a 16-ounce graduate, glass or agateware funnel, a bottle brush, non-absorbent cotton, a pitcher for mixing the food, bottle for boracic acid and bicarbonate of soda solutions, and a steriliser. A nursing bottle should be plain, cylindrical, wide-mouthed and graduated to 8 ounces. With these qualities, the bottle is much more easily cleaned and kept sterile. The bottle should be boiled in a solution of soda water and thoroughly rinsed each day. The nipples should be plain and made from pure rubber, with several small openings, large enough to emit the milk, drop by drop, when the bottle is inverted. It is well to have two nipples at hand. The one not in use should be kept in a solution of borax water or boracic acid solution. Once daily, the nipple should be turned inside out and cleaned with a brush and thoroughly rinsed.

In preparing the food, the milk should be dissolved in the required amount of boiling water, using only the best sugar of milk—such as Merck or Squibb—then add the milk, cream and lime water, mixing the whole in a pitcher. A sufficient quantity for 24 hours is always to be prepared at one time. This is then divided into the number of feedings required for one day, each feeding being put in a separate bottle, and each bottle stoppered with cotton. In warm weather, it is quite important that the milk should be pasteurised, *i.e.*, bringing it to the temperature of 167° for one-half hour. It should then be quickly cooled by standing the bottles first in tepid water, then in cold water, and then placed in an ice chest. This rapid cooling is important, as the slow cooling of the milk would give opportunity for the development of the spores which are not destroyed by pasteurising.

The sterilisation of milk is undesirable, as it is rendered more constipating and difficult of digestion, except when it is desired to prepare the milk for several days ahead, and then it is very important that it should be thoroughly sterilised.

With a strict observance of these rules, the mortality of infants deprived of breast milk may be most decidedly diminished, and the infant develop into a strong and healthy child, and better fortified for withstanding the many diseases incident to childhood.

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Surgical Importance of the Caput Coli, and Its Etiologic Factorate in Producing Inflammation of the Vermiform Appendix.[1]

By J. P. CREVELING, M.D., Auburn, N.Y.

IN OFFERING a few remarks upon a subject of which the foregoing is a sufficiently descriptive title, I wish to invite attention to the fact that anatomically the cecum is the receptacle for all material passing through the alimentary canal. It is the only blind pouch into which that material normally goes, and it is at a great disadvantage to discharge its contents. During the upright position it necessarily becomes a pocket for the digestive tract, with the force of gravity to overcome. The

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N.Y., October 21, 1902.

ileocecal valve prevents the crowding of the contents back into the small intestines and the ascending colon, running vertically as it does, throws on the cecum a greater effort to clear its cavity than any other part of the tract.

Being thus located at the base of a practically vertical tube, the position renders it particularly liable to disease, especially of an infectious and inflammatory nature. The latter process occurring here with the deposition of plastic material may so hamper the action of the bowel that fecal matter is retained within the distorted lumen, and it becomes a nest of infection, particularly for the appendix, the orifice of which is only incompletely guarded and, with structural changes interfering with the muscular closure, it is subjected to increased risk not only of infection, but to foreign substances as well.

We have all seen this organ filled with refuse material before other evidence of disease. This is most likely to occur when the cecal pouch is crippled by inflammatory adhesions. From simularity of structure and position a morbid process in one is prone to extend to, and involve the other, or a cecitis may often mean a subsequent appendicitis, or the converse may take place. The symptoms, clinical manifestations and structural changes in the two are in no way dissimilar, except as influenced by the size of the canal.

Writers of recent years, both medical and surgical, seem to ignore the pathologic importance of this bowel, but Flint in his theory and practice of 1866, gives a brief but lucid exposé of the symptoms and changes that are present in inflammatory conditions of this part. After speaking of the lesions, he says the pain and tenderness are in the region of the cecum with vomiting, diarrhea and febrile movement, and adds that this condition is liable to be confounded with local peritonitis and perforation of the vermiform appendix.

In referring to the latter disease, he gives a succinct clinical description, and then practically locates the now McBurney point in the following words, "the focus of tenderness being on a horizontal line from the crest of one ilium to the other, and just external to the right rectus muscle." He ascribed the general symptoms and peritonitis to local lesions of these parts, but it took some time for the surgical element of the profession to turn these observations to practical account.

A somewhat careful study of diseases occurring in the ileocecal fossa, that have come under my observation, has led

me to believe that a large percentage of the disorders involving the colon, appendix and adjacent structures have their origin in the cecum, and in many instances are mere extensions from continuity of surface. After extensive morbid changes and pus accumulation it is not always easy to determine in what part the disease began. To me it is quite impossible to differentiate the two conditions when certain symptoms prevail and some of us have opened the abdomen for appendicular trouble and found that organ involved secondarily, or even in a comparatively healthy state.

A very marked instance in this direction occurred with me some weeks ago. I was called to a neighboring town to operate for acute appendicitis, and on the way from the train to the house of the patient, the attending physician said, "this is the most typical case I have ever seen, every symptom is just right and characteristic. The pain, tenderness, muscular rigidity, vomiting and all other signs are in proper form." I looked the case over with considerable care and was obliged to confirm his diagnosis. An operation was advised and immediately performed, but when the abdomen was opened, the appendix was found to be small and quite normal, except at the cecal end for half an inch or so down the tube.

The cecum, however, was much inflamed and already well covered by inflammatory product which had fastened it to the parietal wall. There could be no doubt but that the disease in the vermiform extension was secondary to and due to progressive inflammation in the cecum. The appendix was removed and carefully examined, but seemed to be in a normal condition, except as stated, and the serous coat was principally involved; the muscular wall and the mucous coverings showing scarcely a trace of disease.

The point at issue is, the cecum was liberated from the pent down position, adhesions broken up, and the bowel returned to the cavity free. On the day of the operation the temperature was 102°, pulse, 98; but on the following day both had receded to normal. Now there is no doubt that the opening of the abdomen and treatment of the cecum relieved the inflammatory process then going on, and the bowel returned to its normal condition, capable of performing its functions.

I wish very briefly to give the outlines of another case that likewise illustrates not only the difficulty in differentiation but also the more important point, the benefit derived from opera-

tion. Seven years ago I attended a girl then 14 years old through an attack of what presented all the indications of a very acute appendicitis. It was a severe seizure with all symptoms highly pronounced. The pain, tenderness, vomiting, muscular rigidity, and on the tenth day an oval tumor appeared in the proper place. No surgical treatment could be adopted and it required two months for her to recover. From that time until January, 1902, she had had a number of milder attacks, lasting only a few days and then passing away. I had regarded the case as one of recurrent appendicitis and that opinion had been indorsed by a number of men of experience, as some of the attacks occurred in other cities and at summering places. In January last she was again taken with pain and tenderness as before, and by rest, diet and treatment for two weeks the acuteness was overcome, but soreness remained, and except when absolutely quiet she had pain. In February last the abdomen was opened, and as the peritoneum was divided it was seen that the cecum was adherent to the anterior wall of the abdomen to near its entire length. It was dissected loose and brought well out of the wound and on the dorsum lay the little appendix, rather under size, without any appearance of disease or indications of ever having been diseased. She made a good recovery, and has since been entirely free from disturbance in this region. Here, again, there is no doubt as to the lesion causing the attacks, or that the surgical intervention so relieved the condition that further trouble has not to this date reappeared. The tumor during the first attack, I presume, was due to the local peritonitis as a result of the cecitis.

These two are not entirely isolated cases, as others of a similar character might be cited, but they stand as exponents of the position taken, that much of the disease in this region of the abdomen is due to disorder of the cecal tract, and also, that much of such condition is amenable to surgical treatment. The colicky pains in this locality met with in some cases, occurring at intervals for months and even years, without getting materially worse or better, and looked upon as recurrent appendicitis are in some instances undoubtedly due to cecal adhesions. Such adhesions interfere with the full physiologic function of the bowel and may be relieved by operative measures. Another pathologic condition that may take place here, and of which I have seen but one case, is perforation of the intestine.

In this instance a fecal accumulation much too large to be

retained in the appendix, was found floating in the cavity of the abscess. On investigation it was seen that the bolus had escaped through the end of the cecum by way of ulceration. In this case the caliber of the bowel was constricted by inflammatory exudate and the pouch extremely distended. The necrotic condition was probably due to pressure from within, and this in turn to the constriction. The large size of the intestine usually prevents complete occlusion, but the narrowing of the lumen or adhesions to the abdominal wall interferes with normal action, and either is liable to give rise to all the symptoms enumerated. Both conditions are relieved by operative measures and should be a part of surgery.

22 South Street.

Some Observations on the Climate of the West.[1]

By JOHN L. HEFFRON, A. M., M. D., Syracuse, N. Y.

SOME one has said that "the pleasures of life consist of climate and the affections." This is more nearly true than most generalisations. Indeed, the resultant of these two factors, climate, or man's place in nature, and the affections, or man's place in society, is greater than is thus indicated. It would be easy to demonstrate that not only is man's pleasure in living, but his individual characteristics, his communal traits, his moral and mental status and his physical well being are largely influenced by climate and the affections. As physicians and climato-therapists we are chiefly interested in those forces that aid in the establishment and preservation of health. But in our studies of climate if we leave out the social features, the "affections," we make an error that will tend to diminish our usefulness to those who consult us. You remember the story of the old sea captain who at a "revival" meeting in a Methodist chapel failed to rise when all were asked to stand up who wanted to go to Heaven—the Heaven the preacher had eloquently portrayed in his sermon? A good sister approached him and said, "Why, Captain, don't you want to go to Heaven?" His reply was "No! why should I want to go to Heaven and sit naked on a cloud twanging a harp? I'm no singer and I wants my mates!"

Perhaps no better opportunity of studying the climates of some portions of the West and the social features of the various

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 21, 1902.

resorts was ever presented than was given to the members of the American Climatological Society in their trip this summer to the Pacific coast. It was my good fortune to be a member of this party and it gave me an opportunity to correct some false impressions and make some observations which may possibly interest those who employ climate as a therapeutic measure. The itinerary was arranged conjointly by the president, a Denver physician, the secretary, a Philadelphia climatologist, some California friends, and the Raymond & Whitcomb Co. and was made to include the greatest possible points of peculiar interest in New Mexico, Arisona, California, Utah and Colorado.

Right here it might be asked with propriety, "What went ye out for to see?" What do we mean by climate and climatic resorts? I presume Webber's definition, "that combination of atmospheric conditions and of the earth's surface determining the suitability of a region for the life and health of animals and plants" is as good as any. But it may be said with truth that all regions of the earth's surface, or nearly all, are such as to make the conditions of merely living possible to both animals and plants of many species, if not for all. From a therapeutic standpoint, therefore, we must give a more limited definition to climate. A therapeutic climate is such a combination of atmospheric conditions of the earth's surface as makes healthful living most highly possible for those children of men who have the least physical resistance either innate or acquired. In the Walker-Gordon laboratories, milk, the natural food of infants, is separated into its elements and recombined in such a variety of ways as to meet the demands of any vagary of digestion an infant may manifest. If we could compose the various elements of climate, temperature, light, moisture, altitude, topography, soil condition, and the like, in such a way as to meet exactly the needs of various patients it would be a consummation devoutly to be wished, but, working under natural conditions, as we must, we can but search the earth's surface for those regions in which are combined the greatest number of desirable elements with the least of the deleterious factors for each condition demanding climatic changes. The climatic conditions observed can perhaps be best illustrated by reviewing seriatim the different places visited and noting their natural advantages.

At Dodge City, Kansas, we woke up one morning to find

our train stalled and unable to proceed because of a flood which was coming down the Arkansas River and which had swept away bridges and miles of track on the route we were to take into New Mexico. This interruption caused a delay of forty hours, and while it necessitated a change in our program it was not without interest. The Arkansas River at Dodge City under normal conditions in June was a shallow stream in which the omnipresent bare-footed boys disported themselves without getting more than their feet wet while they waited for the flood. The assurance of the train conductor, who had run ahead of the flood, that a cloud burst had occurred in the mountains, and that a wall of water fifteen feet high was surging down the gorge and that at Dodge City the rise would be at least five feet caused the ranchmen along the stream to hurry away their cattle and their families to high ground. This incident is not remarkable but the alternation of flood and drought as prevailing conditions is not observed in the East. Many so-called rivers were crossed in different states in which there was not a drop of water to be seen, only a sandy bed carefully spanned with heavy bridges. On asking why they called these reminders of the fact that water had sometime run there, rivers, the reply was, "Why, the water is there, but it is underground." And it is so. In any of these beds a pipe can be driven and water obtained at different depths, showing that they are natural drainage canals, though filled to the brim only during flood time. As this is one of the disadvantages generally seen, and one which the recent legislation providing for the storage of water is intended to overcome in a measure, it is worthy of mention. When one has seen what miracles can be produced in these desert regions by water and industry, one can but feel that at least as much help should be extended by the general government in the regulation of the water supply of these arid regions as is given for the improvement of rivers and harbors in the more fortunate East.

This is only the first of the anomalies to an eastern observer —rivers that are invisible except in flood, but rivers just the same. Babbling brooks and running streams are a curiosity, and were seen by us only in lofty valleys where snow-capped peaks were near enough to suggest the source. This condition of things, the absence of surface rivers and large bodies of fresh water in lakes and ponds, of course has a great influence on the climate. The humidity of the atmosphere, as a rule, all through

the west is very low, and this is one of the advantageous features of the climate. As a corollary, fogs and mists and heavy dews are never seen in inland places.

Our extra forty hours in Kansas, memorable for many reasons, shortened our stop in New Mexico. Visits all too brief were made at Las Vegas and at Albuquerque, but still they permitted some observations that were of value. It will be remembered that the medical officers of the United States government have selected New Mexico as the seat of two sanitoria for the treatment of soldiers and sailors suffering with respiratory diseases. The air was dry and pure, the sunshine flood the world, an altitude of from 5,000 to 7,000 feet gave light atmospheric pressure, the heat was comfortable summer heat and the soil was dry and porous. These conditions are generally prevalent and uniform. It is stated that the annual percentage of sunshine is over 73 per cent. and that the summers are a little cooler than those of New York, while the winters are a little warmer than at Charleston, S. C. At Las Vegas with an elevation of 6,384 feet the average noon temperature in winter was 40°, in spring 55°, in summer 80° and in the fall 60°. A pure, dry, rare atmosphere is desirable in many cases of lung trouble. But there are some cautions that should always be given patients sent to such a climate. I am aware that much is said of the benefits to be derived by those suffering from heart disease of moderate severity by such climatic conditions. I am not ready to dispute them, but at Albuquerque I saw two young men whom I had seen here in consultation and whose lungs were in such an advanced state of disease that I advised against sending them to a resort so remote from their friends. Both of them had sound hearts in Syracuse. One of them had been so ill that little exercise had been possible, the other had in two years time greatly improved in his pulmonary condition and in his general health, and had been imbued with the idea that he should take as much physical exercise as he could endure. He told me that the day before he had ridden 100 miles on horseback. On examination I found a greatly enlarged heart with a loud mitral systolic murmur.

A prominent attorney who was sent to Colorado from New York in his young manhood for lung trouble, and who had regained his health and had become very prosperous happened to come under my care in an eastern visit during which he had broncho-pneumonia. For several years he paid me annual

visits, and at each I urged his removal from the altitude at which he lived because of the strain upon his heart, which I considered gave evidence of myocardial degeneration. His interests were so tied up with his western home that this seemed impossible to him. He died suddenly while ascending the steps to his office. Of course, both of these cases may be considered as results of other causes than a rarified atmosphere, and I do so consider them, but I think there will be little question but that the conditions are more apt to be developed at an altitude of a mile above sea level than at the sea level, all other conditions being the same. The wise physician, then, will warn his tubercular patient against severe physical exercise in a high altitude and he should do more. He should refer his patient to some physician in the place to which he is sent whom he knows to be skilful and of sound judgment.

If you imagine that the physicians in the west prescribe only air and sunlight you are sadly mistaken. While in every center there are a few physicians who are intelligent and educated and conservative, there are in every climatic resort at the same time a host of quacks that can put to blush any of this species practising in the east. I consider placing the patient under an intelligent and reliable physician immediately upon his arrival in the city of his destination an absolute necessity. It is at first, before he has learned the climatic peculiarities, that he most needs guidance and careful observation. You would hardly credit the instances of the grossest and most unscrupulous impositions on the sick which I could relate to you. The greatest pity of it is that irregular and quixotic methods are not confined to those practising without the degree of some recognised school of medicine, but are indulged in by some who have a high local reputation. So that Polk's Directory is not a safe guide. The practice of sending patients away to a climatic resort with a medicine case and an order to keep you posted about the progress of the case is absolutely wrong. Such a patient is practically certain to get into the hands of a medical fakir, or to commit some costly error.

In Albuquerque we noticed that slight currents of air through the streets blew up considerable dust, and my young friends told me that regularly every afternoon the wind came down the valley in sufficient strength to make a dust storm that was very disagreeable while it lasted. Of course that is not desirable though we met one physician who very earnestly con-

tended that it was beneficial because clean dust simply irritated the mucous membrane mechanically, and in its expulsion the lungs were purged of the discharge from the specific disease more perfectly than without such mechanical irritant. The dust storms in these regions are not entirely confined to cities. Vegetation is possible only along streams or where irrigation can be practised, and we had daily exhibitions of whirling sand on the open in our progress through the country. In fact, I think that our party would vote that the dust encountered in New Mexico, Arizona and inland California was about the only disagreeable thing we met. Of course we have dust, and possibly under similar conditions we would have as much, but my memory of its all-pervasiveness, its penetrating qualities and its sharp sting on mucous membranes classifies it as a different article. These disagreeable accompaniments of an otherwise ideal climate can be minimised, if not entirely eliminated, by care in the selection of towns so situated as to be free from currents that can be the bearers of dust, and New Mexico, like most of the western states, has such a variety of topographical features that all of the climatic elements save moisture can be varied by change in location.

In Arizona our stops were at the Grand Cañon of the Colorado, Prescott and Phenix. This gave opportunity of observing conditions in northern and southern parts of this territory. The elements which are constant throughout Arizona are dry air and a maximum of sunlight throughout the entire year. The temperature in northern Arizona is lower than in the southern parts of the state due to a greater elevation and the greater nearness of snow-capped mountain ranges. But in Phenix, when in the June day of our visit the thermometer registered 100° F. at the government observation station, the effect of the heat is far different than it is with us. While the temperature on that day was 100° F. the humidity was but 2 per cent. and the result was, that after a drive in and about Phenix of several hours in the middle of the day, and an elaborate dinner at 2 p.m. none of us were in the least degree unfavorably affected by the heat, and could not realise from our sensations that the thermometer had registered so high. It was here that we first observed the marked difference in sensible heat between the sunlit places and the shade. It is a difference so marked that no eastern man can properly appreciate it without a personal experience. Any object that casts a shadow is a cool retreat, and it realised

to us the meaning of that oft-quoted passage "the shadow of a rock in a weary land." The same conditions were observed throughout the trip. It was curious to see the birds make use of this discovery and seek for their refreshment the shadow of anything, even a telegraph pole. The same causes which produce this marked difference are productive of the marked difference between the temperature by day and by night. Cool nights are the rule, and this difference is still more marked in those regions where there is an alternation of currents from the mountains and from the plains or from the ocean.

The hospitalities that were showered upon us in Arizona were typical of what we received wherever we went. Nothing that the residents of any of the places visited could contribute to increase our comfort and enable us to appreciate to the full the advantages of their home cities was left undone, so that it can be said with certainty that no stranger will be neglected in any of our western climatic resorts. There is a community of interest and a general friendliness which is not purely commercial and it prevails in all ranks of society. If there is an exclusive set we were not allowed to know it, and if there had been, some of the party were distinguished enough to have appealed to it and to have been marked by the lion hunter in society. No such thing was observed. The literature of Arizona climate is full and that compiled by the government stations is accurate and reliable. The territory offers a wide selection of most admirable resorts for both summer and winter and is without question one of the most favorable places for those afflicted with pulmonary diseases.

In the enormous state of California our stay was much longer and our stops more numerous. Of the inland cities, or foot-hill towns, Redlands and Riverside were types and cities more rich in natural advantages and in the beauty of landscapes, teeming with fruits and flowers, man has rarely seen. At Loma Linda, near Redlands, a modern sanitarium for the care of nontubercular patients has been provided that offers a delightful home with every provision for the modern and scientific treatment of the weak and weary and for the surgical care of those from nearby cities. In Strawberry Valley in the San Giorgione mountains, which readers of Romona will remember was selected by Alessandro as the last stand against the invasion of the white man, Idylwild, a modern sanitorium for the scientific treatment of incipient tuberculosis, has been located and admirably equipped

by a company of physicians mostly residents of Los Angeles. Idylwild has an elevation of 5,500 feet and is situated in a romantic valley wooded with gigantic sugar pines and surrounded on all sides by the towering peaks of this spur of the coast range. Its situation and natural advantages are unsurpassed. Under the intelligent management which it enjoys it bids fair to be one of the notable institutions of its class. It can be said of California in general that the tuberculous patients are no longer solicited. And I think that the testimony of our party would be that except in such choice localities as has been just described the climatic conditions are not ideal for the cure of tuberculosis. On the other hand, after the lesions of phthisis have been healed, no more ideal spot for a permanent residence could be found than is offered by the many beautiful places in Southern California. Of the coast cities many were visited from San Diego in the south to San Francisco. The climate in general is very similar, varied only by the closer approximation of the seas on one hand or the mountains on the other. The temperature is equable but never high. The difference between the temperature of sun and shade and of day and night amounts to more than twenty degrees in many places. Those who imagine that Southern California is a region of eternal summer are doomed to disappointment. The summer weather is much like our late September, and fall clothing and an overcoat are indispensable for comfort. The nights are so cool that lawn parties and the enjoyment of piazzas in the evening are never thought of by those acclimated. To the neglect of precautions against these changes are traceable many of the acute illnesses from which tourists not infrequently suffer. The winters are hardly different from the summers, and it is to the great contrast between the inclement weather of the eastern seaboard and the almost summer weather of California that the ever-increasing popularity of this land of varied charms is due as a winter resort. The freedom from marked changes in weather, the low degree of humidity, the delightful scenery and the opportunity for outdoor life make California the ideal home for the nervous and those exhausted by the cares of business and of social life.

In Utah our only long stop was made at Salt Lake City. The peculiar beauties of this city are familiar to most of you, for no city has been more thoroughly written up than this. It has a dry, cool climate, free from frequent or severe storms, and its

elevation of 4,350 feet, with its great amount of sunlight makes it an appropriate place for many diseased conditions, while the annual rain fall of 16 inches insures a fertility of its fields without so much attention to irrigation. The fact that it is a business center and surrounded by arable fields gives an advantage to many who in seeking a more desirable climate are compelled to earn their living from the start.

The rugged charms of Colorado were revealed to us by the inspiring trip on the Denver and Rio Grande railroad. At Glenwood Springs we found a most delightful climate. The celebrated waters and the hot springs, the bathing facilities and the fine hotel combine to make this place dear to memory. For those suffering from hepatic and rheumatic disorders the advantages here offered are hard to excel, while the lovers of noble mountain scenery will find a never failing source of delight.

Colorado has a greater reputation as a health resort for tuberculous patients than any other state in the Union, and we believe it is well deserved. The whole state has an altitude of from 4 to 10,000 feet while from the mountain ranges 130 peaks lift their sublime heads above an altitude of 13,500 feet. Because of this we have an atmosphere of low pressure. The air is dry and clear and bracing. Fogs and clouds are almost unknown and sunshine is abundant. The temperature varies from a mean of 30° in the winter to about 75° in the summer, but excesses in either direction are not unknown. However, the relative low humidity makes the sensible heat and cold much easier to bear. These conditions and the remarkable results obtained deservedly give Colorado a reputation unequaled for the outdoor treatment of tuberculosis. Colorado has the great advantage of the residence of a body of medical men of more than average intelligence, many of whom are themselves examples of the curative powers of the climate. The large cities are no longer the most desirable localities for patients, tho' Denver and Colorado Springs are so laid out as to be free from crowding and present ample air space about the individual homes, which are the types of residences, and are furnished with unusually good sanitary conveniences. For those infected with tuberculosis who have an equable nervous condition and who have inherited and maintained a good circulation and who have been born to such a succession of seasons as we in Central New York are accustomed to, I know of no more favorable locality for a cure than Colorado offers. On the other hand, I should

hesitate to send there a tuberculous patient with a rapid, feeble pulse or one of unstable nervous endowment.

The various advantages of these health resorts have been described in such exaggerated language, and the stories of the miraculous cures effected have been so broadly advertised that many have gone thither in conditions which were absolutely hopeless and only to die earlier than they would have done had they remained at home. It was our sad duty to pronounce the verdict "dead" upon a poor emaciated consumptive who succumbed in going over the divide. Such cases which increase the local death-rate in health resorts are attributed by the authorities to the ignorance of their attending physicians back east. It may be just in some cases, but of far greater influence in enticing these wrecks of humanity to seek the climatic cure as a last resort are the intemperate and unwarranted claims boldly advertised by interested parties in the west. The climatic cure is legitimate therapeusis under certain conditions. The first essential is an early diagnosis. The second is the ability to support oneself in idleness for a period sufficiently long to insure a complete cure, or until work can be safely undertaken; and the third is a willingness to remain permanently in a region inimicable to the redevelopment of the malady from which one has suffered. Under such conditions and under none others is a physician warranted in separating a sick person from his home and his family.

528 South Salina Street.

CLINICAL REPORT.

A Case of Cutaneous Horn.

By ALFRED E. DIEHL, A. M., M. D., Buffalo, N. Y.

CUTANEOUS horns are rarely seen in these times on the human subject and are regarded merely as curiosities. They present an outward resemblance to the horns of animals, but arise from the skin instead of from the bone, have not their extreme hardness and are not of a uniform shape or size. Horns are usually solitary, but may be multiple; they are either laminated or fibrillated, solid, hard and dry, rounded, oval or angular, generally bent or twisted, and of a gray, yellow, brown, green or black color. They are largest at the base and

vary in size from a quarter of an inch to twelve inches in length; occasionally they are branched. The great majority occur on the head and face; half the cases occur on the scalp, forehead and temples; next in frequency they occur on the eyelids, ears and nose, glans and testicle, the remainder on the body, their preference for the seborrheic regions of the skin being somewhat

DIEHL : A CASE OF CUTANEOUS HORN.

remarkable. They occasion no subjective symptoms and are painful only when injured. The treatment is very simple, consisting merely in removal, followed by thorough curettement and cauterisation of the base, otherwise there will be a recurrence. Lebert who collected the most comprehensive data on this subject observed that 12 per cent., of the cases develop into epitheliomata, hence the necessity for their thorough removal.

The situation of the horn in this case is unusual. I have been unable to find a reference to a similar one, that is, where it has grown from the lip. The history of this case is as follows:

E. H., male, aged 45 years, came to me five years ago presenting an epithelioma on the lip, which I excised, the scar of which can be seen in the photograph on the side of the lip opposite to that occupied by the horn. Three years later he again came to me with a small horn on the lip, but which he would not allow me to remove; finally, it grew to such dimensions that it became a nuisance to him, and he allowed me to remove it, which was done under local cocain anesthesia, followed by curetting and cauterisation. The appearance of the horn is as follows: length, 2 inches; at about the middle, it shows a distinct branch; the base is oval, $\frac{3}{4}$ of an inch in its greatest diameter; it is of a brown color, fibrillated and curved upon its under surface; the interior of the base was of a soft, friable papillomatous nature, which indicated that the origin of the horn was most probably an ordinary wart.

362 Pearl Street.

SOCIETY PROCEEDINGS.

Medical Association of Central New York.

Reported by C. A. GREENLEAF, M. D., Secretary, Rochester, N. Y.

THE thirty-fifth annual meeting of the Medical Association of Central New York was held in the council chamber of the City hall, at Syracuse, October 21, 1902, at 10 o'clock a.m.

Dr. A. L. Beahan, president of the Association, called the meeting to order, at 10.30 a.m. He then stated that the first business in order would be the report of the secretary,

Dr. C. A. Greenleaf, secretary—Inasmuch as this report has been printed in the Transactions, and as it has been customary in the past to omit it, for that reason, I move that the secretary's report be omitted.

Motion seconded and carried.

The president then announced the standing committees:

Business Committee.—S. F. Snow, Syracuse; W. T. Mulligan, Rochester; C. E. Congdon, Buffalo.

Committee on Entertainment.—John L. Heffron, E. J. Wynkoop, H. C. Baum, Syracuse.

Committee on Credentials.—A. L. Benedict, Buffalo; H. L. Elsner, Syracuse; Wm. Clapper, Victor.

Committee on Publication.—Wm. C. Krauss, Buffalo; C. A. Greenleaf, Rochester; Wm. M. Brown, Rochester.

The report of the treasurer, Dr. Wm. M. Brown, was then read and ordered printed:

Dr.

Cash from former treasurer	$229.48
Back dues collected	132.00
	361.48

Cr.

Disbursements	162.21
Balance on hand	$199.27

The president's address, entitled, The Surgical Specialty, was then read. (See page 313.)

Dr. S. F. Snow.—I move that a committee be appointed by the president to prepare resolutions on the death of Dr. E. M. Moore, and report at this afternoon's session.

Motion seconded and carried.

President Beahan.—I will appoint on this committee Dr. H. D. Didama, of Syracuse, chairman; Dr. A. C. Mercer, Syracuse, and Dr. C. A. Greenleaf, of Rochester.

The following papers were then read and discussed:

Practical diagnosis of gastric cancer, A. L. Benedict. Buffalo.

Salient points in the treatment of catarrhal deafness, S. F. Snow, Syracuse.

Two unusual cases of traumatism, W. C. Krauss, Buffalo.

Puerperal eclampsia, Wesley T. Mulligan, Rochester.

Fibroids or myomata with five cases with hysteromyomectomy and exhibition of pathological specimens, J. F. Myers, Sodus.

Some observations on the climate of the west, John L. Heffron, Syracuse.

The association then adjourned for lunch, tendered by the Onondago County Medical Society.

Meeting called to order for the afternoon session at 3 o'clock.

Dr. Nathan Jacobson, of Syracuse, then read a paper on Hemorrhagic appendicitis as the first manifestation of puerpera hemorrhagica.

Dr. Floyd S. Crego presented a report of a Case of myxedema with acromegaly.

The association then took up the matter of unfinished business.

Dr. C. A. Van der Beek.—I have two resolutions I wish to offer. The secretary of this organisation is accumulating quite a number of Transactions from year to year and they take up a great deal of his added space which he likes to devote to something else. I therefore move that these extra copies of Transactions be given to the Rochester Academy of Medicine for exchange.

Dr. Van der Beek.—Last year a resolution was presented before this society in Buffalo, which was laid upon the table at the suggestion of Dr. Howe, who was then president, and I have been requested to present it again. It is in regard to the establishment of a department for psychological research at Washington.

The committee on credentials recommended that the following delegates be elected to permanent membership in the association: Cyril Fulton, Lyons; J. S. Brand, Ontario County; C. C. Frederick, Buffalo; Milton E. Geery, Syracuse; E. P. Lothrop, Buffalo; C. E. Coon, Syracuse. Carried.

The election of officers for the years 1902-1903, resulted as follows: president, E. L. Heffron, Syracuse; first vice-president, C. A. Van der Beek, Rochester; second vice-president, M. L. Bennett, Watkins.

The secretary and treasurer were elected at the last meeting.

On invitation of Dr. J. P. Creveling, the association voted to hold its next annual meeting at Auburn. The Committee on Resolution made the following report:

Dr. Edward Mott Moore, of Rochester, well known here and abroad and universally respected, has passed away since the last meeting.

As he was the first president of this association it is especially appropriate that we should express our regret for his passing away and our sympathy with the afflicted family and all who were acquainted with him and knew his worth and worthiness.

As a husband, a father, a citizen, and a member of the medical profession he had few if any superiors.

We revere his memory and believe that it will be well for us to follow in his footsteps.

H. D. Didama,
Alfred Mercer,
C. A. Greenleaf.

The reading of papers was again in order, and the following were presented:

Some unusual causes of lead poisoning with report of a case, John Zimmer, Rochester.

The separation of the upper epiphysis of the humerus, D. M. Totman, Syracuse.

Surgical importance of the caput coli, and its etiologic factorate in producing inflammation of the vermiform appendix, J. P. Creveling.

Foreign bodies in the larynx and bronchi of small children, with report of six cases, J. H. Halstead, Syracuse.

Immediate repair of the soft parts following labor, Charles E. Congdon, Buffalo.

Utilisation of the sac in the radical operation for femoral hernia, A. L. Hall, Fulton.

The following papers were read by title:

Sympathetic ophthalmia (by invitation), George M. Case, Elmira.

The diagnosis of general paralysis of the insane, W. L. Russell, Willard.

Are the gonococci necessary as an infecting agent in inflammation of the female genitalia? J. Henry Dowd, Buffalo.

A vote of thanks was tendered the Onondaga County Medical Society for its kind hospitality, after which the society adjourned to meet at Auburn, on the third Tuesday of October, 1903.

A banquet was held at the Yates Hotel, at 7 o'clock in the evening, which was well attended and where the best of feeling was manifest.

Buffalo Academy of Medicine.

Reported by N. L. BURNHAM, M. D., Secretary.

Section on Medicine, October 14, 1902.

Dr. George Dock, Ann Arbor, Mich., read a most interesting paper on Jenner's works and their value in the modern study of smallpox.

The speaker gave an account of Edward Jenner, his character, methods of work and steps he followed in the discovery of the efficacy of vaccination. This was based on a study of the first editions of Jenner's various pamphlets, a collection of these

having been loaned to the speaker by Dr. Wm. Osler. Lantern slides of title pages, illustrations and striking paragraphs from Jenner's works were exhibited. The speaker then described the spread of vaccination in various parts of the world; the decrease and subsequent recrudescence of smallpox; the discovery of the need of revaccination, culminating in the events of 1870 and 1871 in France and Germany, and the epoch-making vaccination laws passed by the German empire. A plea was made for general vaccination and revaccination on the ground that the operation was of more importance to the community than to the individual; also for the control of the production and distribution of vaccine material and for the systematic recording of the results of vaccination. Some of the difficulties in the way of these proposals were shown to be apparent rather than real. In the meantime the necessity of careful work on the part of physicians was emphasised.

DISCUSSION.

Dr. DeLancey Rochester in discussing the paper pointed out the evils of commercialism in the production of a reliable virus. He favors state control of the manufacture of virus.

Dr. H. R. Hopkins advocated state control of vaccination and a national organisation of sanitation—a secretary of health. He drew attention to the recent failure of cleanliness in Cleveland as instituted by the mayor to prevent the spread of smallpox.

Dr. Irving P. Lyon remarked that New York city manufactures its own virus.

Dr. Charles G. Stockton complimented the speaker upon an honest statement of the facts relative to the works of Jenner. Physicians should be outspoken and laymen instructed as to the necessity of vaccination in order to overcome the harm done by antivaccinationists.

Dr. Roswell Park stated that it was of interest to note that previous to vaccination, inoculation was introduced from the Orient by Lady Worthy Montague into England. He also referred to the correspondence between John Hunter and his pupil Jenner. The latter performed many arduous duties gratuitously, and added many specimens to the Hunterian collection.

Dr. Arthur W. Hurd referred to the assistance rendered the cause of vaccination by Thomas Jefferson, then President of

the United States, by having his entire household vaccinated by a Boston physician, who introduced into America this method of preventing smallpox.

Dr. Dock closed the discussion, expressing his thanks for the reception and hearty discussions of his paper by the Academy members. He stated that previous to vaccination inoculation was prohibited in the United States. The state control of vaccination is desirable.

Meeting adjourned at 10.30 p.m. Fellows present, 44.

Stated Meeting of the Academy, November 3, 1902.

Reported by F. W. McGUIRE, M. D., Secretary.

Meeting called to order by the president, Dr. Herman E. Hayd at 8.50 p.m.

The minutes of the last stated meeting, held September 9, 1902, were read and approved.

The council recommended the election of Drs. Adolph H. Urban, 523 Franklin Street, and Theodore V. Bauer, 437 Genesee Street. They were duly balloted for and elected members of the Academy.

The program of the evening was provided by the surgical section. It consisted of a paper read by Dr. Roswell Park, entitled, The physics and therapeutic value of the (Röntgen) cathode and ultra-violet rays, with certain references to the electro-magnetic theory of light, with exhibition of new instruments for phototherapy.

The paper was discussed by Drs. Blaauw, Starr, Dunham, Gaylord, Mann, Rochester, Clewes, Bayliss and Hayd.

Adjourned at 10.30 p.m. Attendance, 108.

Section on Medicine, November 11, 1902.

Reported by N. L. BURNHAM, M. D., Secretary.

The regular meeting of the Medical Section of the Academy of Medicine was held November 11, 1902, in the Academy rooms, Buffalo Public Library Building.

Meeting was called to order at 8.45 p.m., the chairman, Dr. Albert E. Woehnert, presiding.

The minutes of the previous meeting were read and approved.

Dr. GEORGE M. Gould, editor of *American Medicine*, Philadelphia, read a paper entitled,

MEDICAL DISCOVERIES BY NON-MEDICAL MEN.

The paper of Dr. Gould was to show how frequently medical discoveries, instruments, and the like, have been led up to by a graded series of preliminary steps, and that non-medical men have often been the discoverers. Even animals have considerable medical and surgical art, and savages and primitive men have displayed remarkable ability in this way, and have made many important discoveries, which were described. The laryngoscope and vaccination were discovered by non-medical men. Moses was the greatest sanitarian that ever lived, and much could be learned of him in hygiene today. These facts are encouraging rather than the reverse, as even the simplest country practitioner, seeing individual diseases and each patient's case differing from all others, has always before him the possibility of individual discovery.

DISCUSSION.

Dr. A. L. BENEDICT, in opening the discussion, drew attention to the sites of the Indian villages in the vicinity of Buffalo. They are near water, located on high ground, while their burying grounds are far removed from their camps, in order to prevent pollution of water supply.

Dr. W. VAN PEYMA pointed out that long ago the use of the scorched cloth upon the navel of the new-born baby was the practice of antisepsis without the knowledge of why it was done.

The paper was further discussed by Drs. Blaauw and Clewes, the latter referring to Pasteur, Liebig, and Fischer as non-medical men.

The second paper of the evening was read by Dr. WILLIAM P. SPRATLING, superintendent of Craig Epileptic Colony, Sonyea, N. Y., on

HOW EPILEPTICS ARE CARED FOR AND TREATED AT SONYEA.

Dr. Spratling referred to the fact that the best way to convey an idea of how epileptics are cared for and treated at Sonyea, was by showing a series of sixty-eight lantern slides, but before doing this he would speak briefly on what the colony system meant.

He referred to two kinds of colonies: one for selected cases only, the other for all epileptics, save those continuously and actively insane. There is no colony of the former type in this

country just now, the only one being the colony at Chalfont St. Peter, near London. The Craig Colony is an illustration of one of the mixed type, since it receives all epileptics save those insane.

Before building or caring for the epileptic in an institution of any kind, his peculiarities must be studied, especially with a view to educate him along proper lines and to provide for his proper classification. Epilepsy being essentially a disease of the brain, in all cases where the disease is genuine, the best form of education is that which recognises manual training to the greatest extent. At the same time some intellectual education is necessary.

Epileptics do all kinds of work at Sonyea, from needle-work and house painting to engine driving. The forms of treatment are varied and are mapped out under these heads: medical, surgical, dietetic and moral. Nothing is lost sight of in the treatment of the case that may be of benefit.

The following summary was given of the treatment of epileptics at Sonyea:

1. It effects cures in a larger proportion of cases than can be effected under any other form of treatment, notwithstanding the fact that few cases are sent to the colony before the disease is essentially chronic.

2. It brings about a reduction in the frequency and severity of attacks in the majority of all cases, a large per cent. being sufficiently improved to permit them to go into the outside world to earn a living.

3. It provides special education for a class in the special manner they require it to make them self-helpful, this being something they cannot get outside of the colony.

4. It promotes individual happiness in a large proportion of cases, due to the patient's living in an atmosphere of congeniality, an atmosphere saturated with a fellow-feeling and desire to help each other.

5. It provides skilled forms of treatment by those who do no work but this, and the opportunity for scientific research that can nowhere else be found and that should be here done for the benefit of all who suffer in this terrible way.

6. Segregating epileptics in this way has a decided economic value, for as long as they are kept in proper seclusion, that seclusion being at the same time most beneficial to the epileptic, it shuts off absolutely the probability of that epileptic handing

down a defective or an epileptic progeny, something that all epileptics are much too prone to do. The presence of an epileptic in the marriageable world is like a bank account at compound interest—it keeps increasing its kind.

DISCUSSION

Dr. William C. Krauss opened the discussion, pointing out the necessity of sending patients to Sonyea during the acute stages of epilepsy, if we wish to obtain the best results. He moved a vote of thanks be tendered the readers of the evening's papers. Motion was seconded by Dr. Charles G. Stockton. Carried.

Dr. James W. Putnam has visited Craig Colony. The epileptics at Sonyea are not a despondent class. Occupation is necessary to successful treatment.

Dr. Allen Jones complimented the speaker upon his valuable and most interesting paper. He requested enlightenment upon the belladonna treatment if used at Sonyea. Also whether in all cases active treatment is carried out, or do some cases go on from month to month without treatment.

Dr. Spratling, in closing the discussion, said that anything and everything that offers relief is used at Sonyea. Drs. Gould and Bennett had refracted many cases with hopes of relief from the epileptic seizures. The belladonna treatment has been used. It is beneficial in some cases; useless in others. Bromides suppress the attacks, but do not cure. Salt starvation is also practised. Bromopin is a new remedy being used at present, which gives very favorable results. It is very expensive, and is best given in an emulsion. Ten grains of this drug are as strong as forty or fifty grains of bromide.

Upon request Dr. Gould, of Philadelphia, referred to his work at Sonyea on eye refraction. He stated it was too early to make any statement as to results. Certainly the correction of eye-strain must relieve many of the accompanying symptoms, as headache, and the like. Dr. Gould was led to try refraction upon Sonyea epileptics on account of the marked improvement resulting in one of his private cases.

Meeting adjourned at 11 p.m. Fellows present, 65.

ABSTRACT.

The Use of Electricity in the Treatment of Habitual Constipation.

Dr. Sigismund Cohn, of New York, brings forward the claims of electrotherapy in the treatment of habitual constipation, and reports the results of his clinical experiments in this field, in an article published in the *New York Medical Journal*, September 6, 1902. As habitual constipation is an independent disease, due entirely to atony of the muscular coats of the bowels, the chief indication to be met is the restoration of the muscular function of the intestine. Mechanotherapy is generally agreed upon to meet this properly, but massage or gymnastics are usually favored, while electricity is comparatively neglected in the treatment of habitual constipation. The currents used are the galvanic, faradic, and combined faradogalvanic, the sinusoidal and the static. Treatment is started with the static, which the author uses either in the form of the wave current or the static induced current, the latter being especially valuable in the obstinate cases.

Very powerful currents can be used in this way without causing the patient any pain. Both these currents can be made more powerful by a mode of administration called the "swelling current," meaning a current that starting from zero gradually swells to a maximum point and then recedes, gradually returning to zero. Alternating contractions and relaxations of the muscles are produced by this method. The effect of this mode of stimulation is that the muscles are exercised in a natural way, without any danger of exhausting them. Very good effects were obtained by the author with the use of the sinusoidal current and he prefers it next to the static. The galvanic current he uses only in the form of hydroelectric treatment. Of the sixteen cases reported to illustrate the application of these methods all but three were cured permanently.

Measuring the abdominal circumference and weighing his patients before and after each treatment, he always found a reduction in the abdominal circumference, as well as the weight of the body. The author explains this loss in abdominal circumference by the fact that the powerful contractions of the abdominal muscles, leave these muscles, right after treatment, in a state of improved tonicity (less flabby and more contracted.)

The consequence is that these muscles are able to offer more resistance to the internal abdominal pressure, therefore the capacity of the abdominal cavity will be reduced and the circumference become smaller. The loss of weight is explained by the loss of H_2O and CO_2. Electrical and especially static currents produce hyperhydrosis, and the greater elimination of CO_2 is explained by the increased work done by the muscles.

Unqualified Practitioners and "Criminal Negligence."

The unqualified man who practised at Willesden, assuming the names of qualified practitioners resident in the Isle of Wight and elsewhere, was on October 29, 1902, convicted of manslaughter at the Central Criminal Court, and sentenced to five years' penal servitude. The charge of perjury, founded on the fact that he had sworn at the inquest that he was a registered medical practitioner, was not proceeded with. The case illustrates the extraordinary ease with which, under the existing state of the law, a person entirely unacquainted with medicine may practice with impunity until he is tripped up by the consequences of his gross ignorance in dealing with a serious case. It will be particularly remembered, owing to the observations made by the judge in his summing-up and his direction to the jury. It has been previously held by the judges that an unqualified and a qualified practitioner were on exactly the same plane in respect of charges of criminal negligence, and that the question of legal qualification and registration was practically immaterial to the issue. Mr. Justice Bigham, as will be seen from the full report of his summing up, which is published at page 1475, has gone a good deal beyond this. He gave it as his opinion that a man like the prisoner to hold himself out as having medical skill was in itself an act of gross negligence, and instructed the jury to take that as a direction from him upon the point. By this ruling the assumption of a medical qualification, coupled with the assumption of medical skill represented by such medical qualifications, is proof of culpable neglect. The importance of this will at once be perceived, inasmuch as it will render the position of the unqualified practitioner in the future much more difficult, and will serve to protect the statutory privileges conferred upon the medical profession. That it is in accord with public policy must be equally obvious, since it will increase the degree of public protection against impostors which it is the object of the medical acts to create.—*British Medical Journal*, November, 1902.

CORRESPONDENCE.

The Maltine Company Prize Essay Awards.

Editor Buffalo Medical Journal :

Sir.—The two prizes, one of a $1,000 and another of $500, which we offered last January for the two best essays on Preventive Medicine have been awarded by the judges, Dr. Daniel Lewis, of New York; Dr. Charles A. L. Reed, of Cincinnati, and Dr. John E. Rhodes, of Chicago, who met for a final consultation at Buffalo. A facsimile of their letter of award is enclosed herewith. Two hundred and nine essays were submitted in competition, and although nearly every state in the Union was represented in the contest, both prizes were won by Philadelphia men.

The $1,000 prize was awarded to Dr. W. Wayne Babcock, 3302 North Broad Street, Philadelphia. His essay is entitled, The general principles of preventive medicine, and was submitted under the nom-de-plume, "Alexine."

The $500 prize was awarded to Dr. Lewis S. Somers, 3554 North Broad Street, Philadelphia. His essay is entitled, The Medical Inspection of Schools—a Problem in Preventive Medicine, and was submitted under the non-de-plume, "Broad."

The two successful essays will first be published in representative medical journals, and then in permanent form for gratuitous distribution to the profession at large.

The following tabulation will undoubtedly prove of interest to you and your readers. It shows how the various sections of the country were represented in the competition:

Alaska, 1; Arkansas, 1; California, 6; Colorado, 4; Connecticut, 5; District of Columbia, 3; Florida, 5; Georgia, 5; Illinois, 15; Indiana, 11; Iowa, 8; Kansas, 2; Kentucky, 3; Louisiana, 2; Maine, 4; Maryland, 2; Massachusetts, 12; Michigan, 7; Minnesota, 7; Mississippi, 1; Missouri, 5; Montana, 2; Nebraska, 2; New Hampshire, 1; New Jersey, 4; New York, 22; North Carolina, 1; Ohio, 11; Oregon, 1; Pennsylvania, 25; Rhode Island, 1; South Carolina, 2; Tennessee, 1; Texas, 2; Vermont, 1; Virginia, 1; Washington, 3; West Virginia, 2; Wisconsin, 10; Ontario, 2; New Brunswick, 1; Unidentified, 5; total, 209.

THE MALTINE CO.,
C. C. Heuman, Secretary.

New York City, Borough of Brooklyn, October 31, 1902.

The following letter in facsimile accompanied the foregoing:

BUFFALO, October 18, 1902.

To the Maltine Company, New York:

GENTLEMEN.—Your committee selected to award the two prizes offered by your firm for essays on Preventive Medicine, or some subject connected therewith, begs leave to report that the large number offered in the competition (being two hundred and nine in all), and the general high grade of their excellence has made the matter of selection very difficult. After critical examination and mature deliberation, however, your committee has awarded:

The first prize to the essay entitled, The General Principles of Preventive Medicine, signed, "Alexine," and the second prize to the essay entitled, "The Medical Inspection of Schools —a Problem in Preventive Medicine, signed, "Broad."

In submitting this report the committee congratulates you upon the wide-spread interest which you have aroused in the very important subject of Preventive Medicine, and it congratulates the medical profession and the public upon the great good that will follow the publication of the valuable addition to literature thus evoked by your enterprise.

Respectfully submitted,

DANIEL LEWIS,
CHARLES A. L. REED,
JOHN EDWIN RHODES,
Committee.

THE TREATMENT OF DYSMENNORRHEA.—This distressing and frequently obstinate complication of the menstrual function is often relieved by a prompt resort to Hayden's virburnum compound. In patients suffering from habitual dysmenorrhea it is well to commence by giving teaspoonful doses every night for a week previous to the usual time. Immediately on the appearance of the catamenia, a good plan is to give two teaspoonfuls every half hour in a wineglassful of hot water, sweetened, and continue to do so until relief is obtained, unless the stomach rebels, in which case the dose should be reduced until it is tolerated. In very severe cases and spasms, hot applications to the loins and inferior extremities are valuable aids as relaxants and in keeping up a healthy circulation. Frequently after taking viburnum compound, the patient will sleep soundly for several hours from the sudden cessation of pain; in such cases she should not be disturbed through any fear of over-sleeping, as the remedy does not contain any narcotic whatever, nor does it leave any disagreeable after-effect, and it may be given to a child, when necessary, without any special caution.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XLII.—LVIII. DECEMBER, 1902. No. 5.

The Conference Committees on Medical Unity.

THE report of the deliberations of the committees of conference of the state society and state association as published in the *New York State Journal of Medicine* for November contains important information which appears to justify comment at this time. It will be remembered by those interested that the committees were appointed for the purpose of "the reorganisation of the regular medical profession of this state," as suggested by Dr. Henry L. Elsner in his inaugural address at the 96th annual meeting of the state society. The net result of the conferences, of which there have been several, seems to be that the society and the association, chartered in 1806 and in 1900 respectively, are expected to unite in a petition to the next legislature asking that their existing charters be repealed and that they be reorganised into a society to be known as The Medical Society of the State of New York. Section 1 of the proposed act provides, "There shall be established by the physicians named in section six of this act an organisation styled The Medical Society of the State of New York."

The reason why the state society should give up its charter, rights, and existence, is set forth in the following: the said society was "formed under a law of 1806, was changed materially in 1813, after which nearly all the important privileges granted have been repealed by many subsequent acts of the legislature, so that the basis of its existence is, today, so involved as to be little understood." This misleading statement which seems to come from the committee of the association, is made and repeated, does not appear to have been questioned by anyone, and

stands as the alleged excuse for the abolition of the state society in its 98th year. Of this statement it may be observed that its element of truth is in the assertion as to when the state society was formed—namely, in 1806. Its further allegations, all and singular, are also misleading in effect. To call attention to the fact and to make the assertion good, is the purpose of this writing. Fortunately, the issue in this case is not decided by shifting emphasis, forcing construction, or straining interpretation. The question is most simple. Do or do not the statutes of 1806 and 1813 exist? Are the privileges of the county societies and state society of "today" less, or equal, or greater than those of former times?

Again, events have, fortunately, conspired to make the proof in this issue not only easy but conclusive. The laws of the state have recently been quite thoroughly revised by a committee on statutory revision. This body of eminent men concluded its labors in 1895, and as a result of its advice and recommendations the entire medical law of the state has been revised and re-enacted. As re-enacted, and as the law of "today" the essential sections of 1806 and 1813, giving powers and privileges to state and county societies, stand in the identical words of the original acts.[1]

The only privileges which were repealed related to the examination of resident students, who were unable to attend a medical college, and who desired to practise medicine within the state. The authority to examine and license these students was without doubt helpful in establishing the popularity and influence of the county societies; but the increase in the number of the medical colleges soon made the practice obsolete and at the time of the repeal of the sections in 1887, they had long been inoperative. However, this loss of power on the part of the organised profession was but a shift of responsibility from one medical body to another, from the society to the college. It was but temporary, for in 1890 the state examining board was authorised as an agent of the state society, and to that board was given powers a hundred fold more important than those repealed in 1887, or at any or all previous times. From this time, 1890, the organised medical profession has guarded the roads leading to the practice of that profession in the state and examined each and every applicant considered fit for examination.

1. Revised Statutes, Codes, and General Laws of the State of New York. Second edition. By Clarence F. Birdseye. Vol. II. 1896. Page, 1968.

Again, in 1885, the state society was given authority to regulate its own membership, whereby it entered upon a condition of independence never before enjoyed, thus gaining the ability to receive delegates, as it now does, from voluntary medical societies, and also ability to increase its number of delegates from the county societies to five times the usual number. To these enormous and newer powers it should also be added that the county society still has, as it has had since 1819, authority to collect annual dues from every physician residing within the county.

All the foregoing conditions are plainly and unquestionably provided for in the various sections of the medical law of "today" and many, even most of them, have been in continuous existence since 1806. We characterised the statement of the committee of the association as misleading which in view of the foregoing statement of facts seems just.

These, then, are some of the reasons why we deem it inexpedient at this time to abolish the charter, the birthright, of our state society which for nearly a century has been the exponent of the organised medical profession of the state.

But if we must express our decided opposition to abolishing our charter, we are not opposed to its amendment from time to time to meet changed and ever changing conditions as they arise or may arise. "Thus far shalt thou go and no farther."

The Grocery Druggists.

IN ALL the Buffalo newspapers recently there appeared a four-column advertisement of a prominent grocery firm which runs a grab-all series of side issues in both its Main street stores, including a drug department. This is unquestionably the approach to the "community of interest" idea, this running together of turnips and tablets and potatoes and pills, to say nothing of peas and plasters. It makes things easy for the customer, for he has only to walk from one end of the store to the other to get material for a Welsh rarebit and the calomel and salines which are usually necessary afterward. The advertisement announced in big letters a "free distribution of full-sized packages" of a queer named doctor's "genuine dynamised" homeopathic preparations. There is then given a list of the pills which may be selected from by the customer who has cut out a coupon

which was printed in the advertisement. And this list is a marvel when one considers that these drugs, by the authority of the firm which fathers the drug store in the patch of cabbages, are advertised as "the only scientific medicines in the world." In the list "infantile bronchitis" is given as pneumonia; "scurfs" as "eczema, raw surfaces;" "pimples on the face, postules;" "tonsillitis" is "quinsy;" "consumption" is "hectic fever, debility and tubercles," each of which have a separate medicine which is guaranteed to cure. "Salt rheum" is diagnosticated as "varicose ulcers;" and "felons" are given the distinguished title of "panaritium." But the acme of what Josh Billings was wont to picturesquely term "damphulishness" is reached in "prostratorrhœa" which is merely designated as "discharges," and in "varicocele," a wasting of the "parts." It would be amusing, this grocery store "community of interests," where one may get soda water, candy, smoked and fresh meats and fish, vegetables, cigars, tripe, pickles and have wasted parts restored, were there not elements of the tragic in the pathos of the thought of how many hypochondriacs there are in this town who are eating those "dynamised" pills because they get them free, and how many babies are being stuffed with them because there happens to be a bottle in the house which bears a label guaranteeing certain cure of "infantile bronchitis."

The pity is that the great state of New York permits gratuitous distribution of any old kind of a fake medicine without regard to the disease or condition of the person who receives it.

The Passing of a Fad.

FOR years the "healers" of the christian science cult have been treating the sick and propagating the theory that all illnesses were merely "beliefs;" they have made much money and have made the study of the published works of Mary Baker Eddy, the high priestess of the faith, a part of their treatments. The results have been profitable for the healers, who never treat for charity, and to Mrs. Eddy who is a millionaire several times over, according to the best evidence obtainable, as a result of the sale of her works.

Deaths due to neglect while under treatment at the hands of christian scientists began to occur and legal action was taken. For awhile there was not the slightest suspicion of conviction in any case. These cases of negligence, cases where pneumonia

and diphtheria were treated by prayer, multiplied and the authorities awakened to a realisation of the fact that a serious problem confronted them. Being a mixture of nonsense and religion, christian science appealed chiefly to women with a hysterical tendency and to men with an eye to the main chance, hence the cult grew in numbers and many of the churches erected were marvels of gorgeous splendor. The christian scientists who took Mother Eddy's course of instruction at high rates for a couple of months' teaching and became "healers," went into practice, waxed rich and fat and sleek and prosperous. And now after many narrow escapes from imprisonment on the part of her "healers" Mother Eddy has reached out a protecting hand, and through force of circumstances has been compelled to issue an order which relegates christian science to the position which it should normally occupy—namely, a religious belief which is capable of doing much good in the world, and no harm to speak of. The edict which has been generally issued, and which it is believed is the result of the flagrant Quinby case in Westchester, reads as follows:

Mrs. Eddy advises that until the public thought becomes better acquainted with christian science, the christian scientists shall decline to doctor infectious or contagious diseases.

If the Eddyists do not admit the existence of disease, which heretofore has been heralded as their shibboleth, by what strange shifting of theory do they now claim the skill of diagnosis in infectious diseases, often difficult to the best trained physician?

In an interview regarding the edict a local healer stated that Mrs. Eddy's request did not in any way indicate that christian science was unable to cope with infectious or contagious disease, but was merely a tentative suggestion made to meet the exigencies of the present until the exact status of the christian scientists is defined by law.

This, then, is the beginning of the end of a fad which has numbered its victims by scores, for the law already defines the exact status of the christian science healer as an illegal practitioner of medicine.

In itself, and confined within legitimate limits, christian science is an order capable of much good. It has made better men and women of its followers; it has taught self-control and a broad-minded brotherly love which the churches of other religions might do well to emulate. True, they have their little differences, but they are never torn asunder by bitter dissension.

The only objection the JOURNAL and the medical profession at large has ever had to the scientists has been their belief in "beliefs" and their unauthorised and ignorant treatment of sick persons, especially children. The deaths of children while under christian science treatment for diseases which would have yielded to proper and intelligent medical management is the blackest stain on the history of Mrs. Eddy's organisation; it is a stain which will never be wiped out by any reform of methods on the part of the scientist church. "Suffer little children to come unto Me," was a divine command; but it was in nowise intended by Christ that the little children should come to Him suffering from neglect.

The church of Christ now takes its place where it belongs—among the religious orders of the world, and as such it is capable of doing much good, as it undoubtedly will; but so far as the practice of medicine is concerned the end is reached.

THE Maltine Company, as noted elsewhere, has made through the committee appointed to decide the matter, its award of prizes for the best essays on preventive medicine, in accordance with its offer of last winter. Both prizes, one of $1,000.00 and one of $500.00 go to residents of Philadelphia. The company deserves the congratulations of the medical profession for its liberality in thus stimulating literary work in the direction named, and scarcely could have chosen a more appropriate field for the manifestations of its generosity.

RECENT examinations of the city water supply indicate that it is contaminated with disease germs. It is difficult to fix the origin of the pollution. The health department has been making bacteriologic examinations and sufficient information is obtained to justify the recommendation that all drinking water should be boiled. It would be well also if it were filtered after boiling.

ONE of the Buffalo evening newspapers (?) just on the eve of the election made a despicable attempt to array the state medical society against Governor Odell. It published a statement that the society had unanimously adopted a resolution condemning the so-called lunacy bill of Governor Odell. It then published a list of the officers of the society and of the members

residing in Erie County, and by innuendo strove to make it appear that the entire medical profession would oppose the Governor's reëlection. As a matter of fact the record of the society at its annual meeting, January, 1902, shows that Dr. Edward D. Fisher, of New York, offered the following resolution:

Protesting against the proposed lunacy bill, which removes all power from Boards of Managers and centralises it in the Lunacy Commission; believing that this would lower the medical standards of the State Hospitals. Seconded by Dr. E. B. Angell, and adopted unanimously.

The import of this is simply that those members of the state society then present, expressed themselves as opposed to such legislation. It did not mean, it could not mean, that a failure of the society's views to prevail would array that body against the Governor. It could not make republicans of democrats nor democrats of republicans; and no species of ratiocination however subtle or adroit, could make it so appear. The society is not a political body.

PERSONAL.

Dr. Edwin Henry Wolcott, of Rochester, has been appointed by Governor Odell a member of the board of visitation for the Gowanda State Homeopathic Hospital, in place of Ogden P. Letchworth, declined.

Dr. William House, U. of B., '95, formerly of Buffalo, has removed from Heppner, Oregon, to Weston, in the same state, where he is engaged in the practice of his profession.

Dr. M. F. Clausius, U. of B., '74, late acting assistant surgeon, U. S. Army, recently stationed at Fort Grant, Arizona, has resigned from the military service, and taken up his residence at Palatine, Illinois, where he will again engage in the private practice of his profession.

Dr. and Mrs. Harvey R. Gaylord have recently returned from Europe and have taken apartments at the Touraine, Delaware Avenue, for the winter. Dr. Gaylord has resumed his professional work and his laboratory investigations.

Dr. J. Hilton Waterman, of New York, has removed from 24 West 50th Street to 50 West 51st Street. Hours: 10 to 11 a.m., and 5 to 6 p.m. Telephone, 6078-38 St.

Dr. and Mrs. Charles A. Ring, have closed their country home, Appleton Hall, and taken apartments at the Castle Inn for the winter.

Hon. Wilson S. Bissell, of Buffalo, has been appointed chancellor of Buffalo University vice Hon. James O. Putnam, resigned. Mr. Bissell has held the office of vice-chancellor for some years past.

Dr. Thomas Hunt Stucky, of Louisville, professor of medicine in the Hospital College of Medicine, Medical Department Central University of Kentucky, recently paid a brief visit to Buffalo.

Dr. Edwin Walker, of Evansville, Indiana, was elected president of the Mississippi Valley Medical Association at its recent annual meeting held in Kansas City.

Dr. Prescott LeBreton, of Buffalo, announces the removal of his office and residence from 122 North Pearl Street to 20 Carlton Street, one door from Main Street.

OBITUARY.

Major Walter Reed, surgeon U. S. Army, died at Washington, November 23, 1902, aged 51 years. His death was due to appendicitis, for which an operation was performed November 17. Major Reed was sent to Havana to investigate the yellow-fever question and it was largely through his researches that the determination was reached that the disease was communicable through the mosquito.

Dr. Reed was born in Gloucester County, Va., in 1851, and was a graduate of the medical department of the University of Virginia and of Bellevue Hospital Medical College, New York. He was appointed an assistant surgeon in the army in 1875 and at the time of his death was first on the list of surgeons with the rank of major. He had been known for years as one of the fore-

most bacteriologists and pathologists of the country. In 1893 he was appointed curator of the Army Medical Museum in Washington.

During the Spanish-American War he was a member of the board to investigate typhoid fever in the army. After the war he made several voyages to Cuba and was on duty in Havana, studying tropical diseases in general and yellow fever in particular. After a series of experiments, which cost the life of one member of the board, early in 1901, it was announced as a proved fact that yellow fever is conveyed by a certain variety of mosquito and introduced into the blood of non-immunes by its bite. Sanitary measures tending to the destruction of the insect and the screening of infected persons were put into effect immediately in Havana by order of General Wood, with the result that for over a year no case of yellow fever has there developed, though the disease had existed permanently in Havana for three centuries. It is impossible to estimate the value of the scientific work of this able, courageous, and self-sacrificing army surgeon. His death constitutes a national loss.

Major Reed is survived by a widow and daughter residing at Washington, and a son, Lieutenant W. L. Reed, Tenth Infantry, now in the Philippines.

Dr. Edward Little, of Buffalo, died at his home, 348 Virginia Street, October 29, 1902, aged 75 years. Dr. Little graduated in medicine at the University of Buffalo in 1862. For many years past he had been conducting a drug store under the Mansion House and attended to that business until within three weeks of his death. He is survived by three children, Miss Elizabeth G. Little, Mrs. E. C. Beale and Dr. William R. Little, all of Buffalo.

SOCIETY MEETINGS.

The Southern Surgical and Gynecological Association held its fifteenth annual meeting at Cincinnati, November 11-13, 1902, under the presidency of Dr. William E. B. Davis, of Birmingham. It was an unusually interesting occasion, the attendance being large, the papers and discussions spirited and the weather propitious. This association is doing most excellent work and

deserves, as it receives, the support of some of the ablest medical men in the country.

The social features of the meeting were especially attractive. They included a luncheon by Dr. Joseph Ransohoff on Tuesday, at the Phoenix Club, which was attended by a large number of members and guests; dinners on Tuesday evening by Drs. Rufus B. Hall, N. P. Dandridge and Charles A. L. Reed, at the Queen City Club; a general luncheon for the entire association and guests at the Grand Hotel, on Wednesday, given by the medical profession of Cincinnati; a banquet on Wednesday evening at the Queen City Club, also by the Cincinnati profession, and a luncheon on Thursday, given by Drs. Edwin and Merrill B. Ricketts. The banquet was one of the best medical dinners ever given to a society. The toastmaster, Dr. Dan Milliken, of Dayton, resplendent with eloquence, wit, humor and general good nature, made the occasion one long to be remembered.

Dr. J. Wesley Bovée, of Washington, was elected president; Drs. Bacon Saunders, of Fort Worth, Tex., and Christopher Tompkins, of Richmond, Va., vice-presidents, and the next meeting was appointed to be held at Birmingham in November, 1903.

The American Public Health Association will hold its thirtieth annual meeting at New Orleans, Monday, Tuesday, Wednesday, Thursday and Friday, December 8, 9, 10, 11, and 12, 1902.

The executive committee has selected the following topics for consideration, but papers will be received upon other sanitary subjects.

General meeting—(1) The pollution of public water supplies; (2) The disposal of refuse material; (3) Animal diseases and animal food; (4) Car, steamship and steamboat sanitation; (5) Etiology of yellow fever; (6) Demography and statistics in their sanitary relation; (7) Cause, prevention, period of incubation and duration of infectious diseases; (8) Public health legislation; (9) Cause and prevention of infant mortality; (10) Disinfectants and disinfection; (11) National leper homes; (12) Dangers to the public health from illuminating and fuel gas; (13) Transportation of diseased tissue by mail; (14) The teaching of hygiene and granting of diploma of doctor of public health; (15) Sanitary aid societies; (16) The relative immunising value of human and bovine vaccine virus; (17) The investigation of the canteen system of the United States Army.

Dr. W. D. Greene, Health Commissioner, and Dr. W. G. Bissell, bacteriologist of the Department of Health, will attend the meeting from Buffalo.

The Western Surgical and Gynecological Association will hold its twelfth annual meeting at St. Joseph, Mo., December 29 and 30, 1902, under the presidency of Dr. James E. Moore, of Minneapolis. Dr. George H. Simmons, Chicago, is the secretary, and Dr. C. H. Wallace, St. Joseph, is chairman of the committee of arrangements.

The American Röntgen Ray Society will hold its third annual meeting at Chicago, December 10-11, 1902, under the presidency of Dr. G. P. Girwood, of Montreal. The sessions of the society, as well as the exhibits, will be held in the Sherman House, Randolph and Clark Streets. Dr. Ralph R. Campbell is chairman of the local committee of arrangements.

Owing to the fact that papers which are to be read at this meeting have to be submitted to the executive committee for endorsement before being placed on the program, it is found impossible this year to issue a preliminary program, but assurance is given that the names which will appear on the program are of the best *x*-ray workers in the country and that the matter will be unexceptionable.

For further information address the secretary, James B. Bullitt, 205 W. Broadway, Louisville, Ky.

The Mississippi Valley Medical Association held its 28th annual meeting at Kansas City, October 15, 16 and 17, 1902, when the following-named officers were elected for the ensuing year; president, Edwin Walker, Evansville; first vice-president, Hugh T. Patrick, Chicago; second vice-president, Wm. Britt Burns, Memphis; secretary, Henry Enos Tuley (re-elected), Louisville; treasurer, Thos. Hunt Stucky (re-elected), Louisville. The next annual meeting will be at Memphis, October 7, 8 and 9, 1903.

The Medical Association of Central New York held its thirty-fifth annual meeting at Syracuse, N. Y., October 21, 1902, under the presidency of Dr. A. L. Beahan, of Canandaigua. The following-named officers were elected for the ensuing year: president, E. L. Heffron, Syracuse; first vice-president, C. A. Van der Beek, Rochester; second vice-president, M. L. Bennett,

Watkins; secretary, C. A. Greenleaf, Rochester, and treasurer, William M. Brown, Rochester. The next annual meeting will be held at Auburn in October, 1903. A full report of the proceedings will be found on page 347.

The Buffalo General Hospital Alumni Association was organised at the Hotel Niagara on a recent date. It is composed of the ex-internes of the Buffalo General Hospital and after a banquet the following-named officers were elected: president, Dr. D. W. Harrington; vice-president, Dr. P. W. Van Peyma; secretary-treasurer, Dr. Wm. H. Thornton. Executive committee: Drs. Thomas B. Carpenter, Edgar R. McGuire, and Edwin R. Gould, Buffalo.

The New York State Medical Association at its annual meeting held at New York, October 20-24, 1902, elected the following-named officers: president, Frederick Holme Wiggin, New York; vice-president, William H. Thornton, Buffalo; secretary, Guy Davenport Lombard, New York; treasurer, E. H. Squibb, Brooklyn; for chairmen of committees: arrangements, Samuel A. Brown, New York library, John Shrady, New York; legislation, E. Eliot Harris, New York; public health, John Scott Wood, Brooklyn; publications, Emil Mayer, New York; nominations, Charles E. Quimby, New York; for delegates to the American Medical Association for two years, Joseph D. Bryant, New York; Elias Lester, Seneca Falls; alternates, Parker Syms, New York; L. D. Farnham, Binghamton.

The sixth meeting of the Congress of American Physicians and Surgeons will be held in Washington, D. C., May 12, 13 and 14, 1903, under the presidency of Dr. William W. Keen, Philadelphia.

Program: The meeting of the congress will be held in the Columbia Theatre, corner of 12th and F Streets. Tuesday, May 12, 3 p.m., the congress will be opened by the president. Subject to be considered: The pancreas and pancreatic diseases. Papers will be read as follows: E. L. Opie, Baltimore, on the anatomy and histology; Prof. R. H. Chittenden, New Haven, on the physiology and physiological chemistry; Simon Flexner, Philadelphia, on the etiology and pathological anatomy; Reginald H. Fitz, Boston, on the symptomatology and diagnosis; Prof. von Mikulicz, Breslau, Germany, and Roswell Park, Buffalo, on the surgery. Followed by a discussion by Charles

G. Stockton, Herbert U. Williams and Maurice H. Richardson. At 8 p.m., address by the president of the congress, William W. Keen, professor of surgery in the Jefferson Medical College, on The duties and responsibilities of trustees of medical institutions.

Wednesday, May 13, 3 p.m., subject to be considered: The medical and surgical aspects of the diseases of the gall-bladder and bile ducts. Papers will be read as follows: Prof. Ewald, Berlin, Germany, John H. Musser, Philadelphia, C. A. Herter, New York, on the pathology and therapy; Prof. Hans Kehr, Halberstadt, Germany, A review of eight hundred cases of gall-stone operations. William J. Mayo, Rochester, Minn., George E Brewer, New York, on the surgery. Followed by a discussion by Frank Billings, George Dock, W. S. Halsted and Henry Sewall.

Thursday evening, May 14, 8 p.m., "Smoker" at the New Willard Hotel, corner of 14th Street and Pennsylvania Avenue.

The Buffalo Academy of Medicine held meetings during the months of October and November, 1902, as follows:

Section on Surgery.—Tuesday evening, October 7. Program: A summary of thirteen operative cases on the gall-bladder and ducts, Eugene A. Smith.

Section on Medicine.—Tuesday evening, October 14. Program: The works of Edward Jenner, and their value in the modern study of smallpox, George A. Dock, Ann Arbor, Mich.

Tuesday evening, November 11. Program: Medical discoveries by non-medical men, George M Gould, Philadelphia; How epileptics are cared for and treated at Sonyea, William P. Spratling, superintendent of Craig Epileptic Colony, Sonyea.

Section on Pathology.—Tuesday evening, October 21. Program: A case of unusual injury of head, recovery, subsequent autopsy, findings, Henry P. Frost; Eosinophilia in trichinosis. Report of a case and review of the literature, Edwin R. Gould.

Tuesday evening, November 18. Program: The pathology and sanitary significance of bovine tuberculosis, Prof. Veranus A. Moore, Cornell University, Ithaca.

Section on Obstetrics and Gynecology.—Tuesday evening, October 28. Program: Report of case of extreme marasmus with recovery, D. E. Wheeler; Eclampsia, John V. Woodruff; Infant feeding, A. J. Colton.

Tuesday evening, November 25. Program: Pelvic abscess and its treatment, Herman E. Hayd; Period of dentition, H. Singer.

Stated Meeting.—Monday, November 3. Program: The physics and therapeutic value of the (Röntgen) cathode and ultra-violet rays, with certain references to the electromagnetic theory of light; with exhibition of new instruments for phototherapy, Roswell Park.

COLLEGE AND HOSPITAL NOTES.

THREE new buildings are being erected near the Michigan University Hospital, Ann Arbor. One, the psychopathic ward, is to cost $50,000. The appropriation was obtained from the state legislature largely through the efforts of Dr. William J. Herdman. The first stages of insanity will be studied here. The state has generously provided for the maintenance of the ward.

The late Mrs. L. M. Palmer bequeathed $20,000 for the establishment of a ward for children. The building which is to be known as the "Palmer ward" is fast approaching completion. Mrs. Palmer also bequeathed $15,000 as an endowment for the maintenance of this ward.

A large new boiler house is also being erected. The old boiler has been removed from the basement of the nurses' home.

During the last school year 3,624 volumes were presented as gifts to the libraries of the University of Michigan. The total additions to the several libraries for the year were 9,539 volumes. Over seven thousand of these went into the general library, over one thousand into the medical library, and eight hundred into the law library.

THE Daughters of the Confederacy have decided to purchase the Stonewall Jackson homestead, at Lexington, Va., and convert it into the Jackson Memorial Hospital.

BOOK REVIEWS.

THE PRINCIPLES AND PRACTICE OF BANDAGING. By GWILYM G. DAVIS, M. D., Assistant Professor of Applied Anatomy, University of Pennsylvania. 12mo, pp. 157. Illustrated from Original Drawings by the Author. Philadelphia: P. Blakiston's Son & Company. 1902. [Price, $1.50 net.]

This small treatise has been greatly improved since the first edition was issued, now about eleven years ago. The text has been rewritten and the illustrations, 163 in all, have been redrawn, hence it is practically a new book. The classic roller bandage is given its appropriate place of importance, detailed directions being given for its construction and application. This is important, for skill in its application once thoroughly acquired is never forgotten, and it furnishes the foundation for all other bandages and bandaging.

The introduction of gauze for the construction of bandages has somewhat lessened the importance of instruction in the art of bandaging, because many suppose that it will do the work no matter how indifferently or carelessly applied. This work will do much to remove this erroneous impression from the minds of those who have made this mistake. The text is clear and the illustrations are excellent. The book is intended for the beginner, but it will do the practitioner no harm to freshen his knowledge of the subject by a careful examination of its pages.

A PHYSICIAN'S PRACTICAL GYNECOLOGY. By W. O. HENRY, M. D., Professor of Gynecology in the Creighton Medical College, Omaha, Neb. First edition. 226 pages, 5 full-page illustrations and 61 others in the text. Lincoln, Neb.. The Review Press. 1902. [Price, cloth, $2.00]

The attempt to present the elementary principles of gynecology in a fashion that will appeal to the understanding of students has been made once and again with failures; now and then success on these lines has been obtained, but it is not the rule. In the present instance the author has pretty nearly hit the mark. The first point in this book that impresses us favorably is that the pronunciation of "gynecology" is given correctly. Since the word came into general use the sins against orthoepy have been multiplied an unspeakable number of times. The old-fashioned "guy-necologist," however, is approaching with more or less speed his appropriate place in the museum of orthopeic history. It is remarkable that any such abomination against the laws of good pronunciation ever could have been practised by educated men. Jin-ē-kol'-o-ji, the pronunciation given in this book, is the *only* way the word should be pronounced, as a distinguished medical philologist remarked to us several years ago, and Henry will have done medicine a good service if he succeeds in correcting this error of speech among the young men in the west.

The general arrangement of the manual is good and its material is well chosen for the undergraduate and general practitioner of medicine, for whom it is particularly designed. The paper and letter press are excellent and the make-up of the book is appropriate.

GIBSON AND RUSSELL'S PHYSICAL DIAGNOSIS. Third edition, revised and rewritten by FRANCIS D. BOYD, C. M. G., M. D., F. R. C. P. E., Assistant Physician, Edinburgh Royal Infirmary. 12mo, pp. 465. With 144 illustrations. New York: D. Appleton & Company. Edinburgh and London: Young J. Pentland. 1902.

Many changes of methods and some advances have been made since the first edition of this book, which is in reality a manual, was issued, now some twelve years ago. This has made necessary not only revision but rewriting a considerable part of the text. The new sections added deal with examination of the blood, examination of the gastric contents, intestinal parasites, the cranial nerves, and clinical bacteriology. Revision has been made of the section on sense of sight, by Dr. George Mackay, who originally prepared it, and whose skill in this department is widely known. Other special sections have been properly revised by the several gentlemen who were responsible in whole or in part for their original preparation.

The illustrations have been largely increased in this edition, but these have not kept pace with the text in improvement. Taken in its entirety, however, the volume is a safe and useful guide to physical diagnosis. It is especially commended to the student and junior practitioner for its practical character, accuracy of teaching, and compact form. Dr. Boyd deserves special praise for the conscientious manner in which he has met the task that has fallen to him as the responsible editor of the third edition of this excellent manual.

DISEASES OF THE STOMACH. Their Special Pathology, Diagnosis and Treatment, with sections on Anatomy, Physiology, Chemical and Microscopical Examination of Stomach Contents, Dietetics, Surgery of the Stomach, etc. By JOHN C. HEMMETER, M. D., Philos D., Professor in the Medical Department of the University of Maryland, Baltimore. Third revised and enlarged edition. Octavo, pp. 883. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $6.00 net.]

The author of this treatise has abundant reason for congratulation, in the conspicuous eminence the previous two editions have given him as a student of the subject he has chosen for special research, and as a clear writer upon it. His teachings as set forth in these books have made him famous the world over.

The columns of the JOURNAL heretofore have stated in unmistakable language our opinion of this work in the notices of the first and second editions. In May, 1898, we took up the treatise in considerable detail, discussing it section by section. In dealing with the second edition in August, 1900, we were

but little less extended in our consideration of the work. We beg to refer our readers to those notices as being equally appropriate today in their application. The science it is true has progressed, but so has Hemmeter, and this new edition has given him the opportunity to add such new material as seemed necessary to keep his treatise in the forefront of professional knowledge.

It is quite certain that this treatise will continue to be, as heretofore, not second to any other textbook on diseases of the stomach.

THE MEDICAL STUDENT'S MANUAL OF CHEMISTRY. By R. A. WITTHAUS, A. M., M. D., Professor of Chemistry, Physics and Toxicology in Cornell University Medical College, New York City. Fifth edition. Octavo, pp. 689. New York: William Wood & Company. 1902. [Price, $3.50 net.]

The first edition of this textbook for students was issued when Professor Witthaus was teaching chemistry at the University of Buffalo. It was used by his pupils then, and it has been their guide in the author's later classes at New York.

Changes have been made in this edition, notably the extension of the section in chemical physics and the condensation of that on mineral chemistry, but in which are now considered the study of the philosophy of chemistry and the broader principles of chemical science. The section on organic chemistry has been enlarged and partly rewritten, and the scattering references to subjects belonging to the domain of physiological chemistry in previous editions have been grouped in a single section, and treated in a more extended fashion. The section on laboratory technics has been omitted, as they belong to the laboratory handbook.

These changes cannot but make for improvement, an objective which this author is ever striving to reach, and they increase the value of the manual very materially. It is a book that students of chemistry will continue to find of great practical help, and the teacher will also use it as a guide to much of his work.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK. Ninety-sixth Annual Meeting held at Albany, January 28, 29 and 30, 1902. Frederic C. Curtis, M. D., Secretary. Published by the Society. 1902.

This volume is unusually replete with interesting material. It contains 62 papers on scientific medical subjects, besides all the other topics dealt with by standing and special committees, whose reports are printed in full. A semiannual meeting was held in New York during the year 1901, and the papers read at that meeting are included in this book.

The attendance at both annual and semiannual meetings was unusually large—363 at the latter and 470 at the former. The large attendance at the semiannual meeting was due no doubt in part to its novelty, and in other part to the fact that it was held

in the City of New York at a season of the year when everybody who can do so enjoys a visit to the metropolis. It is doubtful, however, if it is wise for the society to indulge in this luxury of a semiannual meeting until it makes the regular annual session at Albany all it should be. The third day of that meeting is a stain upon the reputation of this great society. Something should be done to make it as interesting and as well attended as either of the other days.

This volume is beyond the average of state society transactions and ought to be read by every member.

SAUNDERS'S MEDICAL HAND-ATLASES. Atlas and Epitomé of Abdominal Hernias. By Privat docent Dr. GEORG SULTAN, of Göttingen. Edited, with additions, by William B. Coley, M. D., Clinical Lecturer on Surgery. Columbia University (College of Physicians and Surgeons). With 119 illustrations, 36 of them in colors, and 277 pages of text. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $3.00 net.]

In his preface Dr. Sultan says that if this book should succeed in awakening an interest in abdominal hernias among physicians and students and incite them to a careful study of the subject he will consider that his labors have been rewarded. In that case he should rest satisfied, for one could not take up the book for even a casual running over without being deeply interested and studying it seriously. Its text is terse and interesting, and the illustrations are marvelously correct and clear to the understanding. The book edited by Dr. William B. Coley is sufficient evidence that every point regarding hernia in all its aspects is made understandable.

N. W. W.

SAUNDERS'S MEDICAL HAND-ATLASES. Atlas and Epitomé of Traumatic Fractures and Dislocations. By Professor Dr. H. HELFERICH, Professor of Surgery at the Royal University, Griefswald, Prussia. Edited, with additions, by Joseph C. Bloodgood, M. D., Associate in Surgery, John Hopkins University, Baltimore. From the fifth revised and enlarged German edition. With 216 colored illustrations on 64 lithographic plates, 190 text-cuts, and 353 pages of text. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $3.00 net.]

This is the fifth edition, revised, and enlarged, and all through its pages are found evidences of the handiwork of Dr. Joseph C. Bloodgood, of Johns Hopkins, the editor of the edition. Saunders has followed out the general plan first laid down for guidance in the issuing of these hand-atlases and has maintained the high standard. For an atlas of the hand series the book is an admirable one in every respect, chiefly however as regards the illustrations. There are over 200 colored plates and nearly that number of figures in the text. One hardly finds this amount of descriptive illustrating in larger and more pretentious books dealing with surgery. Such a book as this, is one which has long been needed by students and one might say without hesitation, it has been needed by some general practitioners.

The chief value of the work lies in its illustrations. They are admirably executed and there is everywhere evidence of the greatest care in the selection of subjects. The present book has been enlarged by the addition of skiagraphs and Prof. Helferich has wisely refrained from introducing many of the rare conditions which must have come into his clinic. He has confined the illustrations to those conditions which are expected in every day work; not the rarities. There is one fact which stands out boldly in the book. Prof. Helferich knows how to teach—even in a book. He has placed with his Röntgen-ray pictures, skiagraphs of normal joints, and with the normal and pathologic conditions side by side, one has a clearer understanding of what has happened and what will happen under certain circumstances.

N. W. W.

A Textbook on Diseases of Infancy and Childhood. For the use of students and practitioners of medicine. By Henry Koplik, M. D., Attending Pediatrist, Mt. Sinai Hospital, New York. Octavo, pp. 675. Illustrated with 169 engravings and 30 plates in color and monochrome. Philadelphia and New York: Lea Brothers & Co., 1902. [Price, cloth, $5.00; leather, $6.00 net.]

In taking up this book to pass judgment upon it one must have in mind its scope and limitations. It does not aim to cover the whole field of pediatrics, as does Holt's Diseases of Infancy and Childhood, and it cannot therefore justly be compared with such a work. It does not deal at all, or only incidentally, with the surgical diseases of childhood. Diseases which do not differ materially in their behavior in childhood from that in adult life are not considered at length and rare conditions are but briefly described.

The subjects which fall within the intent of the work are in the main satisfactorily handled. Morbid anatomy is not dwelt upon very fully and in this feature one feels that the book is somewhat lacking. The chapter on infant feeding might have been made longer with profit to the reader. To point out now some of the commendable features one may say, not to mention others perhaps equally good, that the chapters on drugs and other therapeutic means, diseases of the heart, contagious diseases, the blood, and scrofulosis, are excellent. In the matter of treatment the book is altogether commendable. One feels that the author is an observing, original and successful therapist.

The illustrations are numerous and good. Many of them are new. There are a few colored plates, among them an excellent one showing Koplik's spots, the pathognomonic symptom of measles first described by Dr. Koplik.

Dr. Koplik has reinforced his own practical knowledge of his subject by drawing largely from both American and foreign literature, as the bibliographies appended to each chapter testify. He announces in the preface that his purpose has been to afford to students and practitioners a practical guide and textbook and it must be conceded that he has accomplished this.

It is of local interest to note that the work is dedicated to the author's preceptors, Drs. Francis Delafield and Matthew D. Mann. M. J. F.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Comprising ten volumes on the year's progress in medicine and surgery. Issued monthly under the general edito ial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume IX. Physiology, Pathology, Bacteriology, Anatomy. Pathology edited by W. A. Evans, M. S., M. D., Professor of Pathology, College of Physicians and Surgeons, Chicago. Bacteriology edited by Adolph Gehrman, M. D., Professor of Bacteriology, College of Physicians and Surgeons, Chicago. Chicago: The Year Book Publishers, 1902. [Price, $ .25; entire series, $7.50.]

The present is one of a series of ten issued at monthly intervals and covering the entire field of medicine and surgery. This series is intended primarily for the general practitioner, the arrangement in several volumes being of special value to him.

This volume covers the departments of physiology, pathology, bacteriology, hygiene and anatomy From the study of the various antitoxins, their physiologic relationship and activity, the writer says: "In summarising the whole matter, a new biologic law has been established: foreign proteid molecules acting on certain living cells give rise to the production of chemical bodies having a specific relation to the substance under the influence of which they were produced; such bodies may be called antibodies." The other departments of this little work are admirably handled, short, concise abstracts being made of the leading scientific articles appearing in the medical literature.

The volume is an important one and shows what an unusual degree of activity is being expended in research work the world over. W. C. K.

THE MEDICAL EPITOME SERIES. Genitourinary and Venereal Diseases. A Manual for Students and Practitioners. By LOUIS E. SCHMIDT, M. Sc., M. D., Associate Professor of Genitourinary Diseases, Chicago Polyclinic. Series edited by V. C. Pedersen, A. M., M. D. Recently assistant demonstrator of Anatomy, College of Physicians and Surgeons, Columbia University, New York. Duodecimo, pp. 249. Illustrated with 21 engravings. Lea Brothers & Co.: Philadelphia and New York. 1902. [Price, cloth, $1.00 net.]

This little volume which helps to make up what is known as "The medical epitomé series" is no more or less than a mine of information upon the subjects with which it deals. In these busy days the older practitioners, and for that matter the younger ones, and even the specialists, find that at times it is necessary to look up subjects on which from not very close acquaintance they are a little rusty, if not considerably foggy.

In such a condition the frame work being up, what is wanted is the filling and this should be handed to us in the most concise, up-to-date and abbreviated manner. Such a field this series is expected to occupy. In this number the subjects are

well dealt with and in a way that shows the author to have an extensive experience. He attained good results and has published them for the benefit of others. The work is well gotten up, convenient to carry in the pocket and should be found in the library of every practitioner of medicine. J. H. D.

A Treatise on Diseases of the Anus, Rectum and Pelvic Colon. By James P. Tuttle, A. M., M. D., Professor of Rectal Surgery in the New York Polyclinic Medical School and Hospital. Octavo, pp. 980. Illustrated. New York: D. Appleton & Co. 1902. [Price, cloth, $6.00; half leather, $6.50.]

The literature of the department of medicine upon which this book discourses with such signal ability, has been enriched very much of late not only in textbooks, but through valuable contributions to magazines.

In the present instance a large special clinic has furnished the material for a treatise not excelled in size or worth by any previous work. Passing over the first two chapters, one dealing with embryology, anatomy and physiology, and the other presenting malformations of the rectum and anus (both of which, however, are excellent and full of interest) we reach chapter three, which is allotted to examination and diagnosis. These topics form the foundation for the entire structure and have been treated with much elaboration in a chapter of 44 pages. It deserves to be carefully studied by undergraduate and general practitioner.

From this point onward the whole treatise is devoted to the consideration of diseases which affect the pelvic colon, rectum, and anus. In the descriptions Tuttle is clear, speaking generally, and his methods, including technic and treatment, are beyond captious criticism. If here and there are found points of difference between Tuttle and other men of experience they are for the most part, of minor consequence, and do not affect in particular the general statement that the book as a whole represents the present state of that branch of the science of medicine which, for the sake of convenience, we are accustomed to term proctology.

In the section relating to venereal diseases of the anus and rectum there is much information of great value from a clinical viewpoint. In dealing with chancroid of the anus, the author details the two theories of origin and regards the question of the presence of a specific virus, as still *sub judice*. It would be interesting to know which view of the subject Tuttle favors. We regard it as important that this doubtful condition in which the mass of the profession finds itself should be settled, and a man with such large clinical opportunities as Tuttle commands can do much towards determining it.

The chapter on hemorrhoids, consisting of 85 pages, is one of the most valuable in the book because it treats of a disease that is more often met than any other which afflicts this region.

It is particularly a disease upon which the general practitioner needs important light. He generally treats it with an "ointment" that is supposed to be the *summum bonum* of therapeutic resource in piles. In this chapter, which we wish might be published as a monograph and given general distribution, will be found very nearly the last word on the subject as at present understood.

The general make-up of the book is most satisfactory. It is a frank presentation of the author's experience and is a substantial addition to the literature of medicine. The illustrations deserve a word of praise being quite largely original in character and instructive in delineation. We bespeak a large audience for this painstaking author.

GENERAL PARESIS, PRACTICAL AND CLINICAL. By ROBERT HOWLAND CHASE, A.M., M.D., Physician-in-Chief, Friends Asylum for the Insane, Philadelphia, late Resident Physician, State Hospital, Norristown, Pa. Duodecimo, 290 pages. Illustrated. Philadelphia: P. Blakiston's Son & Co., 1902. [Price, $1.75 net.]

The appearance of a book devoted entirely to the consideration of paresis is a distinct advance in the science of psychiatry, the nearest approach being the classical monograph of Mickle, which has served as a classic since its publication.

The author is fully qualified to write on this subject having had an experience of more than twenty-five years among cases of nervous and mental diseases. Perhaps no disease of the mind is so little misunderstood among the general practitioners as paresis, and surely no disease deserves a better understanding by the "family physicians," who are the first ones to come in contact with it in their family practice. The literature on paresis is voluminous, but it is so scattered and not in a form to meet the needs of the busy practitioner. The author decided therefore to take up the subject in a methodical manner and as clearly as is possible the special features of this wonderful disease which claims its victims from every walk and station of life. The author naturally takes up the history of the development in his introductory chapter, giving the pupils of the great Esquirol the credit of bringing to light this much disputed disease.

In the succeeding chapters the synonyms and various stages are discussed, special attention being called to the prodromal stage. Short, clinical histories taken from literature are interspersed throughout the book, making it a valuable reference work as well.

Much diversity of opinion still exists as to the different varieties of paresis, the author inclining to the theory of Meynert that there are eight varieties. General paresis runs a milder and longer average course among women, remissions being less frequent. The author finds that it occurs earlier in women, and the percentage of female paretics under the age of thirty is

nearly three times that of male paretics. The author asserts that conjugal general paresis has its explanation in a reciprocal syphilisation. Paresis is not an hereditary disease in the strict sense of the word but the tendency to paresis and other degenerative nerve processes is inherited and renders these unfortunates susceptible. No personal information is given regarding the author's views relating to syphilis—in fact if criticism is to be made, it is that the author rarely gives his own opinion, but quotes those of other writers. Injury to the head is recognised as a cause of paresis and several examples given of its occurrence.

The prognosis is uniformly unfavorable and according to Ziehen some years ago, there were but a dozen cases of recovery on record.

The treatment is most unsatisfactory. There is no special drug or class of drugs which can be regarded as at all remedial in character. The only hope in medication is to relieve the various conditions and to retard the progress of the disease. Iodide of potassium in small doses and for a long time is given as the most valuable drug to delay the decay of the primary neuron.

Many photographs adorn the work; full page pathological plates and diagrams are also included. On the whole, no better exposition of the subject is at hand and the author is to be congratulated on his effort. The binding, printing and paper are excellent. W. C. K.

MEDICAL AND SURGICAL REPORT OF THE PRESBYTERIAN HOSPITAL, NEW YORK. Volume V. January, 1902. Edited by DRS. ANDREW J. MCCOSH and W. GILMAN THOMPSON.

Volume V. of the Presbyterian Hospital (New York) Reports, edited by Drs. Andrew McCosh and W. Gilman Thompson is a credit to the hospital and its medical staff. Twenty-four papers are contributed, each one interesting as well as instructive, and serve as an index of the work done at this popular hospital. The general excellence of the papers is noteworthy, many of them being accompanied by carefully prepared illustrations. Among the more important of the contributions may be mentioned the following:

Tumor of the brain by M. Allen Starr and A. J. McCosh; Acute pancreatitis with the report of three cases, by George Woolsey; Two papers relating to ureter catheterisation, by F. Tilden Brown; A report of twenty-two cases of abscess of the brain, John W. Coe and Burton B. Lee; Wandering kidney and the results of operation, Clarence A. McWilliams; The pathological condition found at 1,000 autopsies, John S. Thatcher; A case of dislocation of the spine resulting in crush of the sixth cervical segment—irregularity in the distribution of the paralysis, A. J. McCosh and George A. Tuttle; three blood analyses, Fred P. Solley; Report of a case of tumor of the

cauda equina, with successful operation for removal—recurrence —death, M. A. Starr and A. J. McCosh; A case of gangrene of the small intestine, due to hematoma in mesentery, as a result of contusion of abdomen, Andew J. McCosh; A rare case of intestinal obstruction, E. Eliot, Jr.; Unusual metrorrhagia, Sidney S. Graber; Cases of multiple exostosis, Forbes Hawkes; A case of epidemic cerebrospinal meningitis, with an unusual skin lesion, Linsly R. Williams; Calculus of the right ureter, loss of function in the right kidney, with compensating hypersecretion of the left, removal of calculus by the transperitonea route, recovery, Forbes Hawkes; A case of subcutaneous rupture of the trachea, with remarks on forty-three similar injuries, Alfred A. Osgood; Sarcoma of external popliteal nerve, excision of three and one-half inches of nerve, union of ends by plastic operation, Andrew J. McCosh; An extension splint for Colles's fracture, Reginald H. Jackson; Fractures and dislocations in the emergency ward of the Presbyterian Hospital for the two years from October 1, 1899, to September 30, 1901, Alfred T. Osgood.

In appearance the volume is similar to the preceding ones and serves as a good example for other hospitals to follow.

W. C. K.

THE PHYSICIANS' VISITING LIST (LINDSAY AND BLAKISTON'S) FOR 1903. Philadelphia: P. Blakiston's Son & Company, 1012 Walnut Street. Sold by all booksellers and druggists. Price, $1.00 for 25 patients a week; $1.25 for 50 patients; $2.25 in two vols. for 100 patients.

The season of the visiting list is again upon us, and the first in the field, as it was originally the first published, is our old friend the Lindsay and Blakiston book. We confess that it has always been a favorite with us on account of its simplicity, compactness, and excellence in quality. There are no waste pages in it, while at the same time it contains all that is needful in such a pocket-book. Among the most useful portions of the preliminary material is the dose-table given in apothecary's and metric systems. The general style of the book is unchanged, though each year witnesses an improvement here and there, in order to keep it up to the requirements of the present, as indicated by experience. This is an age in which a visiting list is an essential part of a physician's equipment and should he choose this one he will have abundant reasons for satisfaction.

THE MEDICAL RECORD VISITING LIST OR PHYSICIANS' DIARY FOR 1903. New revised edition. New York: William Wood & Company.

This visiting list is one of the most popular published, having been issued successively for a long period of years, and apparently it has given general satisfaction. A complete revision of the reading matter in the front part of the list has been made this year. The table of average doses has been carefully revised and brought up to date, all the newer drugs of importance being included. A novelty now introduced for the first

time into a visiting list is the obstetrical chart, facing page 4—a device that will be found useful for making quick estimates of the probable duration of pregnancy. In addition it contains all the usual material found in visiting lists, and arranged in a most convenient manner, the price of the book being from $1.25 to $4.00, according to size and style preferred. The ordinary book adapted to the needs of the average practitioner is arranged for 30 and 60 patients a week and sells at $1.25 and $1.50. The great demand for this diary makes it desirable for those contemplating its use to place their orders promptly, else there may be delay in delivery.

THE PHYSICIAN'S POCKET ACCOUNT BOOK, consisting of a manila-bound book of 208 pages and a leather case. By J. J. TAYLOR, M. D Price, $1.00 complete. Subsequent books to fill the case, 40 cents each, or 3 for $1.00. Published by the Medical Council, Twelfth and Walnut Streets, Philadelphia.

A year ago, upon the first appearance of this unique and practical account book, we gave an unqualified approval of it, because we believed it offered the best condensed system of bookkeeping that had been devised for physicians. We are glad to have the opportunity to confirm our then expressed opinion after practical experience in its use.

The principal advantages of this account book are, that it is simple; that it is legal and will be admitted in court to prove indebtedness; that no posting is necessary, each entry being complete; that it can be carried in the pocket with convenience, hence may be referred to at any time—an important consideration in the country, where the physician is often asked for his bill at considerable distance from home. These and many other points which, for lack of space, we are unable even to enumerate, serve to make it a practical saver of time and money for those who use it. We are glad to be able to say this about the book for, as a rule, we have not been favorably impressed with special systems for physicians' accounts.

THE MEDICAL NEWS VISITING LIST FOR 1903. Weekly (dated for 30 patients); Monthly (undated, for 120 patients per month); Perpetual (undated for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal Grain Leather, $1.25. Thumb-Letter Index, 25 cents extra. Lea Brothers & Co., Publishers, Philadelphia and New York.

This useful visiting list is offered with its usual promptitude and presents an attractive appearance. Its arrangement is admirable and it contains all needful clinical data for daily or emergency use. In the descriptive heading will be found important facts that will enable a physician to choose the book best suited to his needs. The most useful part of every visiting list is the daily record of patients, and in this book the ruling into sections of five lines enables the eye readily to catch the

information sought after entries have been made. Very little that is new can be said in regard to visiting lists in general or in particular, but we may add for the information of those who are selecting for the first time that the *Medical News* visiting list is issued in four styles, adapted to any system of records and any method of keeping professional accounts. It is printed on fine, tough paper, suitable for pen and pencil, and durably and handsomely bound in the size of a wallet for the pocket. When desired a thumb-letter index is furnished, which is an economiser of time.

BOOKS RECEIVED.

Practical Gynecology, Obstetrics, and the Menopause. By A. H. P. Leuf, M. D., Philadelphia. Three Parts, complete in one volume of 326 pages. Published by the Medical Council, Philadelphia, Pa. 1902. [Price, $2.50.]

The Practical Medicine Series of Year Books. Ten volumes. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume I. General Medicine. Edited by Frank Billings, M. S., M. D, Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, M. D., Professor of Medicine, Chicago Clinical School. 12 mo, pp. 358. Chicago: The Year Book Publishers. 1902. [Price, $1.50. Entire series, $7.50.]

Spectacles and Eyeglasses. Their Forms, Mounting and Proper Adjustment. By R. J. Phillips, M. D., Ophthalmologist Presbyterian Orphanage, Philadelphia. Third edition revised. With 52 illustrations. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $1.00.]

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by Henry W. Cattell, A. M., M D., Philadelphia, with the Collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D , London, with Regular Correspondents in Montreal, London, Paris, Leipsic, and Vienna. J. B. Lippincott Company, Philadelphia and London. [Cloth, $2.00.] Volume III. Twelfth Series, 1902.]

A Treatise on Massage. Its History, Mode of Application and Effects, Indications and Contraindications. By Douglas Graham, M. D., Boston. Third edition revised, enlarged and illustrated. Octavo, pp. 462. Philadelphia and London: J. B. Lippincott Company. 1902. [Price, $4.00.]

A Handbook of Materia Medica, Pharmacy and Therapeutics, including the Physiological Action of Drugs, the Special Therapeutics of Disease, Official and Practical Pharmacy, and minute directions for prescription writing. By Samuel O. L. Potter, A. M., M. D., M. R., C. P. Lond, formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco. Ninth edition revised and enlarged. Octavo, pp. 951. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $5.00 net.]

The American Textbook of Obstetrics. In two volumes. Edited by Richard C. Norris, M. D.; Art Editor, Robert L. Dickinson, M. D. Second edition, thoroughly revised and enlarged. Two handsome imperial octavo volumes of about 600 pages each; nearly 600 text illustrations, and 49 colored and half tone plates. Philadelphia and London: W. B. Saunders & Co., 1902. [Per volume: cloth, $3.50 net; sheep or half morocco, $4.00 net.]

American Edition of Nothnagel's Practice. Volume IV. Diseases of the Bronchi and Lungs. Diseases of the Bronchi. By Dr. F. A. Hoffman, of Leipsic. Diseases of the Pleura. By Dr. O. Roseebach, of Berlin. Pneumonia. By Dr. F. Aufrecht, of Magdeburg. Edited, with additions, by John H. Musser, M. D., Professor of Clinical Medicine, University of Pennsylvania. Handsome octavo volume of 1030 pages, illustrated, including 7 full page colored lithographic plates. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $5.00 net; half morocco, $6.00 net.]

The Development of the Human Body. A Manual of Human Embryology. By J. Playfair McMurrich, A. M., Ph. D., Professor of Anatomy in the University of Michigan. 12 mo, pp. 573. With 270 illustrations. Philadelphia: P. Blakiston's Sons & Co. 1902. [Price, $3.00.]

A Text Book of Diseases of the Eye. A Handbook of Ophthalmic Practice for Students and Practitioners. By G. E. De Schweinitz, A. M., M. D., Professor of Ophthalmology in the University of Pennsylvania, etc. Fourth edition, revised, enlarged, and entirely reset. Octavo volume of 773 pages, with 280 text-illustrations and 6 chromo-lithographic plates. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $5.00 net; sheep or half morocco, $6.00 net.]

Bacteriological Technique. A Laboratory Guide for the Medical, Dental, and Technical Student. By J. W. H. Eyre, M. D., F. R. S., Edin., Bacteriologist to Guy's Hospital, and Lecturer on Bacteriology at the Medical and Dental Schools, etc. Octavo of 375 pages, with 170 illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $2.50 net.]

A Treatise on Diseases of the Eye, Nose, Throat, and Ear. For Students and Practitioners. By various authors. Edited by William Campbell Posey, A. B., M. D., Professor of Ophthalmology in the Philadelphia Polyclinic; Surgeon to the Wills Eye Hospital; Ophthalmic Surgeon to the Howard and Epileptic Hospitals. And Jonathan Wright, M. D., Attending Laryngologist to Kings County Hospital, Brooklyn. Royal octavo, pp. 1252. Illustrated with 650 engravings and 35 plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York. 1902. [Cloth, $7.00; leather, $8.00.]

Clinical Surgery, for the Instruction of Practitioners and Students of Surgery. By A. J. Ochsner, B. S., F. R. M. S., M. D., Chicago, Surgeon-in-Chief, Augustana Hospital, and St. Mary's Hospital; Professor of Clinical Surgery, Medical Department, University of Illinois. Royal Octavo, pp. 481. Profusely illustrated. Cleveland Press (The Clinical Review Publishing Company). 1902. [Price: cloth, $6.00; half morocco, $7.00.]

Memoranda on Poisons, by Thomas Tanner, M. D., F. L. S. Ninth revised edition, by Henry Leffmann, A. M., M. D., Professor of Chemistry in the Woman's Medical College of Pennsylvania. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, 75 cents.]

The Public and the Doctor. By B. E. Hadra, M. D., Dallas, Texas. 1902. [Price, 50 cents.]

The Medical Epitomé Series. Diseases of the Skin. A Manual for Students and Practitioners. By Alfred Schalek, M. D, instructor of Dermatology, Genito-urinary, and Venereal Diseases, Rush Medical College, Chicago. Series edited by V. C. Pedersen, A. M., M. D., House Surgeon at the New York Hospital. Illustrated with 34 engravings. Lea Brothers & Co., Philadelphia and New York. 1902. [Price, $1.00.]

The Practice of Surgery. A Treatise on Surgery for the Use of Practitioners and Students. By Henry R. Wharton, M. D., Clinical Professor of Surgery, Woman's Medical College of Pennsylvania; Surgeon to the Presbyterian and Children's Hospitals, Philadelphia, and B. Farquhar Curtis, M. D., Professor of Clinical Surgery, and Adjunct Professor of the Principles of Surgery in the University and Bellevue College of New York. Third edition. Octavo, pp. 1249. Illustrated, Philadelphia and London: J. B. Lippincott Company. 1902.

A Textbook of Pathology, and Pathological Anatomy. By Dr. Hans Schmaus, Extraordinary Professor, and First Assistant in the Pathological Insti-

tute, Munich. Translated from the sixth German edition by A. E. Thayer, M. D., Instructor in Pathology in Cornell University Medical College, New York. Edited with additions by James Ewing, M. D., Professor of Pathology in Cornell University Medical College, New York. Octavo, pp. 614 Illustrated with 351 engravings, including 35 colored insert plates. Lea Brothers & Co., Philadelphia and New York. 1902. [Cloth, $4.00 net.]

A Textbook of the Science and Art of Obstetrics. By Henry J. Garrigues, A. M., M. D. Consulting Obstetric Surgeon to the New York Maternity Hospital, Gynecologist to St. Mark's Hospital. Octavo, pp. 874. 504 Illustrations. Philadelphia and London: J. B. Lippincott Co. 1902.

LITERARY NOTES.

THE Charles Roome-Parmele Company, of New York, has issued a brochure, entitled, Diabetes Mellitus; its Treatment and Cure. The pamphlet contains clinical reports by some fifteen well-known physicians residing in various parts of the country and who have obtained satisfactory results—in some instances remarkable cures—from the use of arsenauro in diabetes mellitus. These reports have been published by the authors in the medical journals—*The New York Medical Journal*, *The International Medical Magazine*, and others—and they have been grouped in pamphlet form for the information of physicians. This makes them conveniently accessible and in doing this the publishers have rendered a service of value to the profession. The book will be sent on application to Charles Roome Parmele Company, 45 John Street, New York.

THE Maltine Company, Borough of Brooklyn, New York City, has just published a brochure, entitled, Neoferrum, the New Iron. The book contains a chemical history of the new agent, followed by clinical reports upon its use by Dr. Thomas M. Acken, of New York, made in the West Side German Dispensary and in private practice. The pamphlet is handsomely printed and will be supplied upon application to the Maltine Company.

THE Buffalo State Hospital has lately issued its thirty-first annual report, which is for the year ending September 30, 1901. It is an interesting pamphlet of sixty-eight pages, illustrated with numerous half-tone plates, giving views of the exterior and interior of the hospital. It appears that during the year 2,293 patients were treated, and that the minimum number under care was 1,859. It is surprising that such efficiency of administration can be obtained with this enormous number

of insane patients, as Dr. Hurd and his staff are well known to have reached. The management of this hospital is a model in medical and business methods and is a credit to Buffalo as well as the state.

Mariani and Company, of New York and Paris, are publishing a handsome periodical called *Mariani's Coca Leaf*, the first number of which bears the date November, 1902. Its object, as stated in its foreword, is particularly to present to the medical profession the most recent information relating to the therapeutical uses of coca. It being an occasional review, its appearance will be comparatively infrequent, perhaps once a quarter, and will be of interest, it is thought, to physicians. At all events, its first number is full of information about this interesting and useful plant that should be read by even the most fastidiously and ultra ethical medical man, who sniffs commercialism in every publication that carries an advertisement of any manufactured preparation not in the pharmacopeia. This little magazine will be sent to physicians, if they will send their addresses to Mariani & Co., 52 W. 15th Street, New York.

The *Wichita Medical Journal* is the name of a new magazine published at Wichita, Kan., edited by Dr. G. K. Purves. Its subscription price is one dollar a year. The October number contains a number of interesting and well written articles relating to a variety of medical subjects.

ITEM.

Monument for Rudolf Virchow.—The German committee in charge of the celebration in honor of Rudolf Virchow's eightieth birthday—Prof. Waldeyer, chairman; Prof. Posner, secretary—has begun collecting funds for the purpose of erecting a monument in memory of that great and unique man and physician. The undersigned are anxious and ready to receive contributions which will be duly acknowledged. Frank Billings, president of the American Medical Association, 100 State St., Chicago; Thomas D. Coleman, 505 Greene St., Augusta; A. Jacobi, 19 East 47th St. New York City; W. W. Keen, president of the congress of American Physicians and Surgeons, 1729 Chestnut St., Philadelphia; Wm. H. Welch, 935 St. Paul St., Baltimore.

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ORIGINAL COMMUNICATIONS.

Salient Points in the Treatment of Catarrhal Deafness.[1]

BY SARGENT F. SNOW, M. D., Syracuse, N. Y.

IN ADDRESSING this body on chronic deafness, I need offer no apology. Articles on this subject are notable for their absence. We all know this is not because there is lack of material, for there is an abundance of it, and made up of people quite willing and able to have treatment if physicians unite on its advisability.

There is no question but that the successful handling of a case of chronic catarrhal deafness means more careful consideration and more broad painstaking work than any other condition aurists are called upon to treat; obstacles must be recognised and each one overcome before good results are accomplished. What is most needed is that a greater number of the aggressive workers on otology should become more actively interested in this branch of the specialty.

It seems to be generally understood that chronic ear cases are unsatisfactory and beyond improvement, but medical and surgical progress has decreed that an invariably poor prognosis shall not remain the rule. In fact, I believe that a good prognosis should much more frequently be given.

Local intranasal factors must be taken care of before embarking upon a treatment of the deafness itself, but the mistake is often made that they are the whole cause, and too much benefit is expected from their removal. It is many times thought that the hearing will improve or at least by treatment be capable

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 21, 1902.

of improvement as soon as the morbid nasal states are out of the way, but in 80 per cent. of the cases, this improvement does not come, and why? Simply because there is some unrecognised constitutional factor keeping the eustachian tube occluded, and thereby preventing good returns from the best and most thorough operative work within the nose. A course of treatment attempted before the constitutional factor is removed will prove both unwise and unprofitable.

At present our most effective way of handling chronic cases of catarrhal deafness is by jets of stimulative vapor, made by passing air under pressure over a supersaturated solution of gum camphor in tincture of iodine, through the eustachian tube to the middle-ear, but no good can come from such treatment if the tube is stopped up by congested membranes. No treatment for the relief of chronic catarrhal conditions will be effective if given while the body is covered by an inactive, sensitive skin, causing these congestions.

The common habit of warm bathing, coddling, and living in superheated rooms is most pernicious and sure to be followed by membranes that are thick and loaded; with our modern environment it seems absolutely necessary to do something to counteract these tendencies, hence the observance of personal hygiene becomes one of paramount importance. As a rule cold baths should be taken, but when impracticable, which is seldom, a brisk dry rubbing with a harsh towel not only starts a good reaction, but exercises the skin, an important step in promoting elimination, tone, and vigor.

Either or both of these measures can be depended upon to so toughen the surface that it ceases to act as a menace to the deeper membranes and organs. Head colds are not as common and nature has a chance to produce absorption of inflammatory products.

Protection of the body should become less and less a problem of importance as the patient acquires a prompt skin reaction, but protection for a time has to be considered, and at all times so far as relates to footwear, the feet always needing to be kept warm and dry. Wool or linen mesh are the best materials for undergarments, but they should be of light weight and porous, while the outer clothing should be selected to insure comfort and changed according to the weather conditions.

That pathological states of the liver produce an increase in the thickness of membrane lining the eustachian tube is too often

noticed to be gainsayed. In fact, with some a torpid liver is the most prominent constitutional factor, and may block all our efforts to get local treatments through to the middle-ear. A large percentage of these bad chronic cases of deafness can be traced to an over indulgence in the good things of life; the liver becomes unable to do extra work required and curbing the appetite is absolutely necessary.

The stomach and bowels also come in for their share of attention. Dyspeptic or intestinal disturbances, as well as uric acid and uterine troubles produce an irritability of the mucous lining of the head, quite sufficient to necessitate their correction before the tubes remain normally patent. These phenomena of congestion and recongestion of weakened membranes from functional disturbances account in a large measure for the intractibility of chronic catarrhal states.

Deafness in the subacute form, or in recent cases may respond to rather crude method of treatment, but when we meet the more aggravated forms, some of which have been slowly progressive for ten, or twenty years, we have a different proposition before us, and but few specialists without an experience in general practice are equipped for the work, and not even then unless they be painstaking and persistent. Every little side issue must be studied to see what influence it may have on the ear condition.

Habits and environment of the chronically deaf need most careful scrutiny, for they must be corrected or it is better to advise the patient against further treatment. Professional reputation is too precious to be jeopardised by an attempt to handle such cases without the intelligent and willing coöperation of all intimately concerned.

Vigorous exercise can be made a great aid in relieving distended blood-vessels of their load. It has been the author's frequent experience to find it impossible to keep the eustachian tubes clear until the patients were persuaded to do vigorous active arm exercise every morning as a routine. Local treatments do little more and are not always within reach.

Fleshy people are prone to avoid exertion, but they are not the only ones who need urging to physical exercise. We find them in all lines of clerical or professional work. These people practically use nothing but their brains; all their head membranes are in a state of passive congestion with dilated blood-vessels, which condition may be effectively relieved by vigorous

arm movements. Surgical and therapeutic problems are small compared with, or difficulty in, regulating the diet.

Cold bathing as a requirement is not such a hardship after a little practice, neither must one have modern bath conveniences; a wash basin will contain enough water to start a good reaction, and if used immediately after the exercises above mentioned will materially assist in starting the mucus and contracting the arterioles. The dry rub down at night acts in a similar manner and prevents taking cold after perspiring.

It goes without saying that necessary operative work within the nose must be done and done thoroughly; it is one of the "points of necessary prominence." No one with a projecting nasal spur, pressing middle or prolapsed lower turbinate can avoid frequent congestions; but experience in otological work has proved to me that the reason why many attempts to relieve chronic catarrhal deafness result in failure is principally because the constitutional factors have not been appreciated. Treatments have been forced through an eustachian tube still too sensitive, only to be followed by an unpleasant reaction, and an increase in the bad symptoms.

A manifest error is that argument that because the patient has increased deafness after a treatment he cannot be helped. Experience shows that either this increased deafness will clear up with a few daily trials or that it is simply an evidence that our attempt at improving the function is too previous. All causative factors have not been gotten out of the way or enough time has not elapsed since our operative work for nature to readjust herself to the new conditions, the eustachian membranes are still so sensitive that even the injection of a mild vapor causes them to become more swollen, which effect later on, under a better local and constitutional state, will not be produced.

To sum it all up it is virtually impossible to successfully handle a case of chronic catarrhal deafness where there is low vitality, a sensitive skin, or frequent functional derangements; whereas, without these obstacles, a correction of morbid nasal conditions makes the disease non-aggressive and capable of much improvement by the persistent camphor and iodine vapor treatment.

204 E. Jefferson Street.

Unusual Causes of Lead Poisoning, with Report of a Case.[1]

By JOHN ZIMMER, M. D., Rochester, N. Y.

IN VIEW of the manifold and obscure channels through which lead may enter the system, as well as the difficulty oftentimes of referring the symptoms of intoxication to their proper source, especially when a knowledge of contact with the metal is to be acquired only by direct and searching inquiry, a brief consideration of this subject seems not without interest and importance, as lead, like the poor, we have with us always in some form or another.

Although almost every occupation produces a special liability to certain forms of disease, those who work in lead show by far the highest mortality, from an occupational standpoint. Manufacturers of white lead, painters, glaziers, plumbers, workers in rubber factories, and the like, are frequently the subjects of plumbism.

The danger of some of these occupations is so great, that states and countries have at different times attempted legislative control. Thus France in 1878, passed a law prohibiting the use of lead oxide in glazing pottery. In 1897, England also passed a similar law, after receiving the annual report of the chief inspector of factories, which showed that there had been 1,390 cases of lead poisoning, acute and chronic, among pottery workers, most of whom were women. As a result of this intoxication, abortion and sterility had become very common among them. In Philadelphia there is a local ordinance which prohibits the employment of laborers in the white lead factories for more than three months at a time.

It is not my purpose, however, in this paper to consider these common modes of infection, but rather some of the unusual causes of poisoning by this metal. A hurried review of the literature on this subject shows that considerable has been written along this line. Thus the Rome correspondent of the *London Lancet*, in August, 1896, reports a curious instance of wholesale lead poisoning, especially in Milan, caused in an unusual manner. It seems the sausage manufacturers paid the government tax on their products by means of a lead seal attached to the sausage. The sausage was cooked with the seal on, and the various salts contained in the meats, *e. g.*, nitrate of potash,

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 21, 1902.

chloride of sodium, and the like, together with the practice of washing the intestines with vinegar or sour wine, coming in contact with the lead oxide, all combined to produce a very active poison. The sausages are consumed in large quantities by the natives, and the liquor in which they have been boiled is distributed to the poor. It was only after colic had become epidemic, that an analysis of the sausages disclosed the cause. The lead seal has since been replaced by an innocuous metal.

Pel, of Amsterdam, in June, 1897, reports three cases of chronic plumbism. The first occurring in a shoemaker who was accustomed to hold tinned nails in his mouth while at work; the second was a cigar maker, using a board covered with lead plate, on which the cigars were cut with a knife, and then putting the knife in his mouth; the third was in a man employed in embedding diamonds in a warmed lead mass, manipulating this with his fingers moistened with saliva.

Ransome, in *British Medical Journal* of June, 1900, reports three cases of lead encephalopathy, caused by using diachylon ointment as an abortifacient. It seems the English druggists sell balls of this preparation, representing about 23 grams,for a half penny, which is used to a large extent among the poorer classes for the purpose of producing abortion. The practice has become so prevalent that steps have been taken to control the sale of this preparation.

Hahn, in *Archiv für Kinderheilkunde*, in August, 1900, reports two cases of convulsions in children resulting from the use of unguentum lead oxide for eczema of the face and head. Death occurred in one case, the diagnosis being made post-mortem.

Barnes, in *Archives of Pediatrics*, September, 1900, reports two cases of lead poisoning in children caused by the use of fire wood, consisting of staves of old barrels which had contained white lead, the fumes being inhaled and also entering the food. Convulsions was a marked feature of these cases. The diagnosis was made by the blue line at the gums and the finding of lead in the urine.

Cases have also been reported among the cutters of precious stones in the Jura mountains, who use a lead wheel for grinding. Hair dyes, face powders and lotions, are also occasional sources of this intoxication. A case in which paprika, adulterated with the red oxide of lead, was the means of infection, is reported in the *Medical Record* of January, 1898.

When lead has been taken into the system it becomes deposited in the various tissues or is discharged by the emunctories. It has been found in all of the tissues of the body. Ranon, a French observer, working experimentally with guinea pigs, found lead in the salivary and parotid glands, which explains the occasional parotiditis seen in man in cases of plumbism.[7] It is eliminated mainly by the kidneys.

The symptoms of lead poisoning may be acute or chronic. The acute form is easily recognised, especially when there exists the characteristic colic and a history of contact with the metal. The chronic type, however, particularly where the symptoms are mild and there is no direct history of using lead, may cause some difficulty of recognition, as the following case suggests. The history is as follows:

W. S., age 29; male; married; U. S.; occupation, lens polisher. Family history negative. Personal history: had usual diseases of childhood. Three years ago was ill about ten days with what his physician called typhoid fever. Careful inquiry of the nature of this illness suggests the possibility of a mild plumbism, as the principal subjective symptoms were headache and vague pains throughout the body. Otherwise he has been perfectly well. Has worked at his occupation of lens polisher for past seven years.

Present illness—Patient presented himself at my office February 21, 1902, with the following clinical history: for the past ten days has had a gradual increasing headache, pain in back and legs, tingling and numbness of fingers, chills, sweating and unable to sleep.

Present Condition—Patient is well nourished, weighing 145 pounds; height, 5 feet 7 inches. Is a mouth-breather, owing to nasal obstruction caused by injury to nose when young. Pulse, 60; temperature, 98 2-5°; bowels regular; some anorexia; tongue clean; lungs, heart, kidneys, and the like, negative. Assuming the case one of myalgia, was treated with phenacetine and salol for two days with no result. February 24, patient complains of intense headache and backache, unable to rest or sleep. Pulse, 60; temperature, 98 2-5°. As he gave a history of having chills and sweating, quinine sulph. in large doses was prescribed and an examination of the blood made. The results were negative with no relief of pain. February 26, an examination showed some enlargement and tenderness of the liver; also considerable swelling and pain of right parotid gland. Pulse, 64; temperature, 101 2-5°. At this time there was seen to be a faint blue line on the gums. Plumbism was suspected, in spite of the fact that the patient was not aware of handling lead. A careful inquiry into the nature of his work showed

that the lenses are polished by means of a paste or rouge on a soft buffing wheel. He was given a saturated solution of mag. sulp. until free catharsis occurred, and potass. iod., grs. v., 4xd. The next day patient felt some better and there was a continued improvement of all subjective symptoms from this date. No fever; pulse, 60. After giving potass. iodid. for five days, an examination of the urine by the potass. sulphide test showed the presence of lead. March 5, patient complained of cramps in calf muscles for the first time. These lasted three or four days, and then cleared up. The swelling of the liver and parotid gland also subsided. At this time it was noted that the pulse, which had always been in the neighborhood of 60, strong and full, now counted 90, at which point it remained some five or six days, and then subsided to normal. Lead was repeatedly found in the urine up to March 18, at which time the patient reported well and resumed his work. Later he procured a specimen of the rouge used in his work, and an analysis showed unmistakable evidence of lead, although not in large quantities. The base of the preparation is the red oxide of iron, so that the lead is probably an impurity.

Some interesting features of this case are, that although there are a great many polishers of lenses employed at this factory, the patient said that he had never heard of any of the other workmen being poisoned, although there were always a few sick with rheumatism, grippe, and the like. In the light of the above case it is possible that there may have been other cases which escaped recognition. Certainly it is not known among the workmen that they are handling lead.

Personal factors in this case might have been responsible for his susceptibility; as was previously stated the patient is inclined to breathe through his mouth, thus permitting the fine dust to pass more readily into the system. That the quantity of lead in the rouge is not large is suggested by the long term of constant employment at the work (seven years), and the rather vague and insidious onset of the intoxication, which indicates the gradual accumulation of small quantities, frequently and regularly repeated.

There was an entire absence of abdominal symptoms, *e. g.*, constipation, colic and the like, but rather features suggesting inanition of the nerves and membranes of the brain, together with a low grade inflammation of the liver and parotid gland, which, had the process continued, would have lead to more serious changes, paralysis, wrist-drop, and the like.

In view of the obscure nature of this case it suggests that even where there is no direct history of working with lead, an

examination of gums, urine and the like, might well be made a routine practice among workers in factories, where subjective symptoms are of an atypical character.

50 CUMBERLAND STREET.

DISCUSSION.

Dr. C. E. CONGDON, Buffalo.—This paper has been extremely interesting to me, as it brings to mind that about ten years ago I was called by a general practitioner to see a case of appendicitis. The doctor thought the case was typhoid fever, or it had been diagnosticated so. This man already had passed through two hands, the diagnosis was appendicitis, and the medical treatment was being carried on. He suffered from diffuse pain in the abdomen; there had been no headache, no muscular pain; the history extended back about a year, with recurrent attacks of pain in the abdomen. Relief was obtained, he said, by small drinks of whiskey early in the morning. When I saw him the pulse was slow and full. The urine was not examined. I found no line upon the gum upon examination. He was quite tender in the abdomen, and there seemed to be considerable rigidity over a certain point. It looked very much like appendicitis, but that was not to be thought of, extending over that length of time, and I decided at once that he had lead poisoning. By the use of iodine of potassium, he was relieved in two or three days. It is well to bear in mind these conditions, and I think this paper is extremely timely, owing to the fact that lead poisoning can produce symptoms, abdominal manifestations, which will so closely simulate appendicitis.

Dr. ZIMMER.—I would like to add since writing this paper I have come across another case, in which a young man employed at cutting curtain shades showed unmistakable evidences of insidious lead-poisoning. His principal symptoms were malaise and vague pains, but not enough to keep him from his work. He looked anemic, and he did not know whether he was sick enough to come to a physician or not, but I examined his gums, and after giving him potassium iodide, I found lead in the urine. As I say, these cases are sometimes very obscure. Of course, this young man did not realise he was handling lead, although I have no doubt that the dust from cutting these curtain shades led to this affection.

WORMLEY (*Medical Age*) speaks of good results obtained in gastrointestinal catarrh by the use of cold compresses. They are applied as a girdle made of towels, wrung out of cold water and wrapped around the abdomen and left on all night. The relief from the flatulence and eructations, common in these patients, is remarkable.

To What Extent May the Female Genitals be Saved From Mutilation?[1]

By J. HENRY DOWD, M. D., Buffalo, N. Y.

WHEN one considers the vast amount of suffering among our female population, practically all such giving the history of trouble following marriage, and we as medical men knowing that practically four-fifths of it is due to preventable causes, must not the question arise, what can be done to prevent it?

German authorities tell us that at least 85 per cent. of inflammatory disease of the female genitals is due to gonorrhea, fully 40 to 45 per cent. of the operations on these organs being due to the same cause.

We may go a little further, taking statistics which are undoubtedly true and we find that about 30 per cent. of sterile marriages, and no less than 10 to 20 per cent. of blindness, before the introduction of Credé's method of treatment, due to the same cause.

Neisser places gonorrhea next to measles in the order of contagious diseases, and furthermore claims that in some European cities no less than three-fourths of the population have had the disease. It can scarcely be said that the disease is as prevalent in America, yet it may be safely stated that at least 4 out of 10 of the male population have been its victims. Some authorities claim that gonorrhea is never cured, that its complications which may arise are never fully eradicated. This the writer must dispute and affirms that gonorrhea, if treated rationally, is curable; that is, practically all cases; complications which have arisen can be permanently eradicated, the patient put in a condition where there is no danger of infection either from gonococci, strepto- or staphylococci, the two latter being seen in the shreds and pus found in the urine long after there is no discharge and the former cocci have disappeared.

Three of the most prolific causes of inflammation are the strepto-, staphylo-, and gonoccoci, the first two being usually mild in the results produced as compared with the latter. Granting the above to be a fact, it also must be admitted that if the microscope shows the gonococci to be absent, but strepto- or staphylococci are present, infection is possible. If the case pro-

1. Read before Section on Surgery, Buffalo Academy of Medicine, December 2, 1902.

gresses favorably, about the sixth or eight week there is an absence of discharge, but if the urine is examined it will be found to contain floating débris, any or all of which the microscope will show to be composed of pus, epithelium, mucus, normal urethral bacteria, strepto- and staphylococci, but usually no gonococci. This débris is due to different causes, chief of which, especially in the early stage, is the fact that inflammation is still present, but not of sufficient intensity whereby pus will be produced in quantity sufficient to appear at the meatus. One other factor in causing its expulsion from the canal is coitus. The longer the interval, the more secretion; therefore we find the greatest amount in the morning, the canal not having been flushed for seven or eight hours. It must be evident that when the canal is free, *i. e.*, in an apparently normal condition, if infecting material is contained in the numerous follicles of the prostate, ejaculatory ducts, vesicles, Cowper's gland, and the like, it is expelled at this time. When the latter condition exists there may be an entire absence of any and all objective symptoms, but by careful questioning subjective symptoms may be elicited that will point to a condition in these parts showing that they are not normally functuating.

A word as to infection of the female genitals by gonorrheal or other forms of inflammation. It is a well known fact that all women have more or less discharge, commonly called leucorrhea, even virgins having this at times to an extent necessitating wearing of a protective; and, further, intense inflammation may exist around the cervix, with no other symptoms presenting. Practically the same condition may be present of a gonorrheal nature and with no other symptoms than already mentioned presenting. That gonorrhea may exist in the female unknown, is easily accounted for by the fact, that it is rarely that intercourse is attempted by the male until there is no discharge at the meatus or only a very slight secretion, brought forward by firm stripping of the organ. In this condition the infecting material when expelled, is deposited not at the vulva, where the parts may become inflamed accompanied by ardor urinæ, swelling and a sense of uneasiness, but against the cervix, a practically insensitive part of the anatomy. Accepting as a fair estimate that about 40 per cent. of males have had gonorrhea, that not 25 per cent. of these are permanently cured, but have infecting cocci, not necessarily gonococci, in the urethra, is it little wonder, as heretofore stated, that about 85 per cent. of inflammatory

disease of the female organs can be traced to, and give a history of trouble originating after marriage?

In speaking of a remedy for this condition contention will not be made that the 85 per cent. of post-marriage inflammations of the female genitalia can be prevented, but the medical man who will remove all sources of infection from the patient before pronouncing him cured will have the satisfaction of knowing if his patient ever marries, that the genital organs of one female will remain intact.

A male patient having had inflammation of the genital tract may be considered well and in an aseptic condition when there is no discharge from the meatus containing bacteria or pus cells, nor can it be reëstablished by liquor or coitus, with no symptoms referrable to the testicles, prostate or seminal vesicles, the urine being clear of all pathological débris. One and the chief cause why so many men are circulating among the community having infecting bacteria in their urethræ, is the fact that the original trouble was treated upon a lump, or contract basis, instead of by the visit.

Inflammation of the urethra extending over eight weeks is always accompanied by involvement of the deeper parts, this necessitating at times long, careful and scientific treatment to bring about a normal condition. When the number of visits are counted, the wear and tear on the medical man's nervous system taken into consideration, the case extending into months before what may be considered a cure is obtained, is it any wonder, in a cure-you-for-ten-dollars case, the patient is discharged the moment, perchance, by a strong injection or the passage of a sound, pus ceases to flow?

Conclusions.—Gonorrhea in the male being curable in at least 95 to 98 per cent. of cases, and I mean by that placed beyond possible danger of conveying infection, it is only natural to make the bold statement, if the disease is healed rationally and until all danger of infection has been obliterated, the percentages of inflammation in the female genitals should be reduced to a minimum.

The argument that the druggist treats three out of five of these cases has no standing, for the reason, that they do not stop the discharge in one out of ten, the remaining nine having sooner or later to consult a physician.

378 Franklin Street.

Immediate Repair of the Soft Parts Following Labor.[1]

By CHARLES E. CONGDON, M. D., Buffalo, N. Y.

THE subject of immediate repair of lacerations of the soft parts due to parturition is one that should interest us all. This is a subject upon which at least nearly one-half of gynecology rests; it is a subject so extensive and in its results when unattended, presenting such a variety of phases and often so complex, that it comprises a large percentage of the practice of medicine.

Almost daily I see women with a history of having been in the hands of one or more specialists with little or no benefit, their entire illness dating from a childbirth in which injuries to the parturient canal were unannounced and unattended, or if repaired were unsuccessful.

Many writers are inclined to the belief that the reason these injuries go unannounced is that we are dazzled by the brilliancy and wonderful achievements of modern abdominal surgery; this to a certain extent may be true but popular superstition and prejudice combined with professional jealousy have rendered it unwise and unsafe to inform a patient of her true condition following labor. He is a bold obstetrician who informs his patient that she has a laceration, for if he does, almost as sure as fate, some rival will assert that it was unnecessary and avoidable; therefore in order to popularise the work of immediate repair it becomes necessary for us as a body to point out the necessity or to await the demands of the laity—a day which is not far distant.

Diagnosis.—It should be remembered that these injuries occur more frequently internally than externally; that is, they always begin from within, and may be superficial lacerations or they may extend through any or all of the soft parts. I have seen lacerations that opened the peritoneal cavity, that lacerated the uterus beyond the internal os, extending through the broad ligament, through all the soft parts opening up the ischio-rectal space; lacerations anterior into the urethra or on one or both sides of the urethra, extending through the vestibule, even lacerating the hood of the clitoris, through both labia. The more common lacerations are in one or both sulci, and, as I said before, of varying degree.

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 21, 1902.

Prognosis.—The prognosis in these cases of immediate repair is good; the hemorrhage, which is quite profuse, ceases instantly upon tying the properly introduced sutures. In my first cases I was very much surprised at the slight amount of hemorrhage, at the lessened amount of lochia and the easy and rapid recovery the patients so treated made. The reason for this is to be attributed to the lessened shock from hemorrhage, the lessened exhaustion which follows the lochial discharge, and last but not least there is no infection area.

Treatment.—As regards the prophylaxis it is impossible in many instances to prevent the occurrence of lacerations. I have seen many lacerations and none so extensive as where instruments were not used; on the other hand, I am inclined to believe that instruments in some cases have been the cause and this can only be overcome by their judicious use when the case requires instrumental delivery.

The subject of the prophylaxis of injuries to the parturient canal in justice to itself requires an entire paper, therefore I will dismiss the subject by saying that I do not believe that the mind of man ever has or ever will be able to formulate principles and details so that injuries to the parturient canal, the result of labor, will become a matter of history.

The method which I follow is to put the patient in the lithotomy position, introduce retractors, so as to expose the cervix, grasp it with a tenaculum, and slight traction brings it to the vulva where the sutures may be easily introduced. As soon as this is accomplished the uterus is replaced, the vagina cleansed from blood-clots when it will be noted that the blood which obscures the field of observation disappears, making the repair work on the vulva and vagina very simple; in fact, I believe this to be the key to the successful finding and uniting of these injuries.

Some obstetricians recommend the introduction into the vagina against the cervix of a tampon in order to keep the field of observation from being obscured by the hemorrhage coming from the uterus. This is unnecessary when the lacerated uterine tissues are united.

Now by properly introduced sutures, if the sundered tissues are brought into perfect apposition, primary union will almost invariably be secured; if the repair work has been properly executed the after-treatment is of little moment.

1034 Jefferson Street.

DISCUSSION.

Dr. A. B. Miller, Syracuse.—The subject is an interesting one, and one which should be of special interest to the general practitioner. Dr. Bannan, who has a wide experience in treating these cases, is here, and I would like to ask the chair to call on her to discuss this paper.

Dr. T. Bannan.—I consider that I am the victim of an unfair advantage in being given the privilege of the floor; also, I deny the ability to discuss this paper as it should be discussed. My experience in obstetrics has been confined, as far as laceration is concerned, to prophylaxis. I do not think any repair can begin to compare with the prevention of laceration. I have never seen, even when they were involved, the extended lacerations as have been mentioned in the paper. Another thing, at the end of twelve, fifteen, eighteen, twenty-four hours of labor a woman is rarely in condition to undergo even the repair suggested. The physician, if he has been attentive, is rarely in condition to give a satisfactory repair. The experience that lacerations are more extensive without forceps than with has not been in my line. The trouble in most cases is laregly a moral one, where the woman becomes impatient, the doctor equally impatient, where forceps are applied before the cervix is ready for it, where the membranes are ruptured before they have completely dilated the cervix, before the peritoneum has begun to relax, the forceps put on and the child extracted, without any attention paid to extraction during the pain. These are the conditions which lead to laceration, and in the vast majority of cases where we know the children are born without any attending physician, it certainly does not seem right in the harmony of things to say that an extensive sewing is necessary after a normal parturition. Not one thing more than another should be emphasised than the conduct of labor in a natural way, to know when it is natural, to know what a natural delivery is, what the prevention is, what the hygiene of pregnancy is. If we understood those things, and if our medical students were taught the power of nature itself, then they will know when to put on instruments and when not to put them on, and we will not have the extended laceration nor the need for the surgical repair which this paper has offered.

Dr. R. M. Moore, Rochester.—I do not agree with the last speaker exactly, because I think we always encounter lacerations of the cervix in some degree in every case of labor. I do not think a woman will have a baby without some laceration of the cervix, and even in small lacerations sometimes there will be an ectropion of the mucous membrane. The laceration itself is a matter of no moment, provided we do not have this ectropion surface. I have been paying some attention to this subject for two years past, and I find that my patients do a great deal better if a recent repair of the cervix at least is made. I do not agree

with the writer that an immediate repair is wise. We have a very elongated cervix to deal with and the tissues are very flabby, they do not hold the stitches well, but if a recent repair is made and by that I mean within the first 48 hours, or immediately after 48 hours, we have a sufficient involution occurring, especially of the cervix, so that it makes it a very easy, simple matter and one that is invariably successful, provided we do not have an infection, like gonorrhea. The reader did not speak of one thing that I think in regard to the technique is a necessary one. You can't bring the cervix to the vulva easily unless you empty the bladder absolutely, and although the patient may have urinated, and the nurse will tell you, "why she has just emptied her bladder," you will find if you put in a catheter and make pressure above that there are four or five ounces of urine left behind, and without emptying the bladder completely you cannot bring the uterus to the vulva as you should. I have tried a number of sutures. I have found that the easiest and the most simply applied and the one that acted the best was a simple continuous ball stitch of a very small size. There was another thing I noticed also in this, that you must sew the cervix up very small, you have got to make it almost complete, so that you can just introduce your finger into the cervix after it is through. If you don't do that, when you examine your patient again in a couple of weeks you will find that you have not repaired the cervix completely; you will think that you have done so, but there still remains a slight defect. The patients that have their cervices repaired will have involution go on much more rapidly than those that have not had repair done. They convalesce much more quickly. They get up free from a leucorrheal discharge, free from that pain in the back which so many women have. I have operated upon or have sewed up between forty and fifty cases. I have at first simply sewed those cases that were primiparous. Of late I have been making the operation on multiparas as well. That is, those whom I had examined and found with an old laceration they were suffering from, I go right on and make the operation. I think it is much easier to do it. That saves your convalescent from the confinement, the trouble of a second operation. I agree with the reader of the paper that these things should be taken up, not immediately, but within forty-eight hours.

Dr. A. B. Miller.—I feel it would be unfortunate to leave the impression with this body of medical practitioners that we are in sympathy with doing repair on the soft parts immediately, especially of those of the cervix. I was not under the impression that the paper dealt with the lacerations especially of the cervix. We have here a body of fibrous tissue, in whch in the course of delivery the cervix is completely taken up. We have a complete obliteration of the cervix. We know as a positive fact that involution cannot take place under three or four months, that the cervix will be scarcely perceptible for a week or ten days.

I believe with the last speaker that lacerations do take place in the majority of cases, but nature repairs or takes care of the majority of them. All the anterior and posterior lacerations are repaired by nature. We do occasionally find the unilateral or bilateral laceration that requires an operation. I know it is the teaching of special men in this department that the time to do an operation in the fibrous tissue is not immediately following parturition. The paper deals, or at least I supposed it dealt, with lacerations of the soft parts, and laceration of the soft parts as I understand means the pelvic floor and not the perineum. When it comes to injuries of soft parts, as stated in the paper, I am pleased to say I have never seen anything of the nature of that spoken of by the author, with one exception, and that should have been discussed this morning when the paper was read on eclampsia. I believe in immediate repair of the soft parts of the perineum and extending up into the vagina; I do not believe in doing repairs to the fibrous structures.

Dr. J. P. CREVELING.—There may be some men here like myself located in rural districts where we have to get along the best we can without trained nurses or assistants. We get a perineum laceration and we cannot help ourselves at times. Somehow, I believe the best thing under these circumstances is to tell the people and then, without any consideration of professional jealousy, proceed to sew up that rent just as well as we can and just as soon as we can.

President BEAHAN.—I have taken considerable interest in this subject in the past year, and think I will join the Rochester contingent. I read a paper last year before the Medical Society of the State of New York at the October meeting, which Dr. Charles Judd, of Brooklyn, discussed, and he was rather severe on the position assumed, namely—that these injuries should be repaired immediately, but after the meeting I had a conversation with him, and he was very glad to know what was being done in this and other regions in regard to this matter. In the various comments in the several journals that I happened to read, the position assumed by that paper, which was of immediate repair, was favorably spoken about. I consider that this paper is in the right spirit, and that the immediate repair of all the parts pertaining to parturition is worth considering, not only of the cervix but also the perineum, and that the woman after confinement is entitled to be placed in the same condition she was before her confinement, that the laceration should not continue for an indefinite length of time before repair, if it can be restored, as Dr. Moore has indicated, and as has been developed in Rochester. The subject is well worth further consideration and your interest. Within a year I have seen two instances of attempted suicide in women who have had lacerations, both of the cervix and of the perineum, and it seems probable that the indirect cause of this condition of the mind was due to the old

laceration. In each of these instances, too, attempts had been made to repair the lacerations so far as the perineum was concerned, and in one of them with regard to the cervix. I believe that after involution has partially been effected by the influence of douches, by the administration of ergot, and then by putting the patient in the best possible position, as Dr. Congdon has indicated, and in a good light, let everything be properly cared for, and let the patient be put upon her feet in good condition at the end of two or three weeks, rather than wait until an indefinite time, when somebody will discover and repair the rents. A woman I think is entitled to immediate attention, and not at a remote time.

Dr. C. E. CONGDON.—I am very much pleased that this paper brought out such a discussion. I wish to say, in justice to myself, that these patients are usually brought to the hospital for repair. I may say also that I have confined several cases and I have examined them, and I have had men present who never saw a laceration, but they did not walk out of that room without seeing one, and I frequently give them the privilege of observing the patient from the beginning of the pain to the finish; and they will generally find extensive lacerations of the cervix. I wish to ask the doctor who very kindly opened the discussion if she ever examined a patient herself for lacerations?

Dr. BANNAN.—Yes.

Dr. Congdon.—Then I will refer you to Matthew, VII. Chapter and 7th verse. As to prevention, naturally prevention, is better than repair. I do not believe it is possible for any one to restore anything to its original perfection. In regard to lacerations of the cervix, Dr. Moore is right when he says you cannot bring the entire cervix to the vulva, but you can bring the cervix to the vulva, as I stated in my paper, with properly introduced retractors on both sides; you will then have very little difficulty in bringing the surfaces together; and I was very glad he brought out the point which I failed to refer to in the paper, and that is, how extremely small the cervix is when the surfaces are coaptated; you may just get your finger in it. Then by introducing the silkworm-gut sutures one after another, carefully adjusted, the parts can be made to approach their natural state. This subject was discussed by the American Association of Obstetricians and Gynecologists in Washington some time ago, and it was the consensus of opinion that these injuries should be repaired immediately, but in cases where the surroundings were filthy and unsanitary there was believed to be great danger of infection. This paper was by Dr. Ill.

The point was touched upon as regards the appropriate time for repair of the cervix, and Dr. Moore suggested forty-eight hours. Forty-eight hours might be a good time, but I believe the general consensus of opinion is that within twenty-four hours constitutes immediate repair. Dr. Miller suggested trusting these repairs

to nature. I don't know but that it may be a wise plan, but I think for a number of years we have trusted these things to nature until nearly every woman who has borne children will be found, upon examination with the speculum, to have a large hypertrophic cervix, with induration, and an ectropion surface, with a foul smelling purulent discharge from it that is exhausting her, until she becomes so pale and anemic that she is not capable of taking care of her work or her family, and life is unbearable; and those cases I want to say right here nature will never cure. They are beyond it; it is too late. Nothing but a radical operation will be of the slightest benefit.

As regards the vagina, some of the parts are brought together to prevent infection, but as regards the perineum, that naturally is very easy to repair at the time of rupture. Dr. Moore mentioned repairing old lacerations at the same time. This, too, is very simple and very easy, but the fascia and muscle should be brought together. One word more, and that is, when you have a cervix that is lacerated, perfect muscular contraction cannot take place. The cervix is opened up, and you know that in the lining of the cervix various glands are lodged there. They become irritated and congested, and care should be taken to excise them in old cervical tears. Unless this is done these surfaces become a nidus for cancerous disease.

The Utilisation of the Sac in the Radical Operation for Femoral Hernia.[1]

By A. L. HALL, M. D., Fulton, N. Y.

FOR a time the opinion prevailed that femoral hernia was less amenable to radical operation than the inguinal variety. Experience has not only demonstrated the incorrectness of this view, but has shown that the per cent. of recoveries is greater in the femoral type.

Of the numerous operations devised for the radical cure of femoral hernia, which have been brought forth from time to time, few have met the general approval of the profession.

In the Bassini and other approved operative methods, occlusion of the canal is effected by suture, after the greater portion of the sac has been excised well up within the canal. As far as I am able to learn, utilisation of the sac for canal closure has never been practised. Several times within the past few years I have operated for strangulated femoral hernia and in each instance a radical cure resulted. In the last two cases a portion

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N.Y., October 21, 1902.

of the sac was used to occlude the canal. The operative technic employed is briefly described as follows:

The first case was that of a woman aged 72 years in whom acute strangulation had existed for nearly two days. The sac was exposed and opened in the usual way. Intestine, only, was present and being in good condition it was returned within the abdominal cavity. The sac was freed, the dissection being carried for a short distance up the canal, its length reduced to about one-half inch—the approximate depth of the canal, and divided by a longitudinal incision into two equal parts. These flaps, formed from the sac, were deprived of fat, inverted and pushed up the canal until their ends approximated the femoral opening. The lower portion of the invaginated sac was quilted together with fine catgut and the lower canal opening closed by uniting its edges with strong catgut, a considerable portion of the canal being included by the sutures which were continuous. The incision was closed in the usual manner. Recovery was rapid and uneventful. Two years later, the patient died of acute dysentery. There was no return of the hernia.

The second case was an adherent omental hernia of the femoral variety occurring in a woman aged 57 years. The omentum was detached from the sac with some difficulty, found to be healthy and replaced. The technic was the same as in the previous case, the sac being utilised to close the canal. Five years have elapsed since the operation without recurrence.

The limited experience recited proves but little, nevertheless extended trial in the utilisation of the sac for the radical cure of femoral hernia may demonstrate advantages not obtainable by other methods. At least a simplified technic is assured, and there are excellent reasons, I believe, for claiming for it results superior to any obtained by other operative measures.

Does the Public Telephone Transmit Disease?[1]

By WILLIAM G. BISSELL, M. D., Buffalo, N. Y.

Bacteriologist, Department of Health.

VARIOUS manufacturers have, from time to time, turned out devices to be attached to the transmitters of public telephones, claiming that their use minimises the possible transmission of disease from this source. The question often has been asked, "Does the public telephone transmit disease"?

In order to discuss this question, two important points must be considered:

1. Read before the Medical Union, December 17, 1902.

First, is the human body, and particularly the mouth, of well persons, a possible carrier of infection?

Second, if so, what part does the telephone play in transferring such infection?

The popular conception that a disease germ enters the body, produces its disease, and passes out again without receiving a great amount of resistance, is not confirmed by scientific investigation and experiment. In every infection there are two opposing forces, and the variation in the resistance of the individual and the strength of the germ decides the resulting factor.

If the germ has the greater power, the disease is the result, but if the vital forces are in excess, the organism, although it may have gained entrance, does not cause disease. The same is true of the final exit and the destruction of the germ after the recovery from disease; and this leads to the inference, proven in a variety of conditions, that persons, to all appearances physically well, may become carriers of germs. Experimental evidence has shown that many germs carried under these conditions are capable of infecting animals, and there is no basis for belief that germs carried in this way are none other than harmful. Their harmlessness in the instance mentioned simply expresses the degree of immunity, either inherited or acquired, to the particular disease represented by the germ.

Laboratory tests clearly demonstrate that microbes identified as belonging to a particular species of pathogenic bacteria are, as a rule, virulent. Such organisms, when carried in different locations, are capable of being shed, hence constitute a source of danger in the transmission of disease. For example, in chronic pulmonary tuberculosis, the disease being one of the respiratory tract, and invariably accompanied by coughing, the organism is expelled in immense numbers. Individuals who have recovered from typhoid fever and cholera, although not ill, continue to give off the germs of these respective diseases.

It is probable that the microbe of influenza vegetates on the mucous membranes for a period of time after recovery from that disease. It has been known, for more than twenty years, that the germ of croupous pneumonia flourishes in the mouth of every healthy person. If we consider these facts, and remember that the diphtheria bacillus may, and very frequently does, persist in the throat and nose of persons who have come in contact with diphtheria, and yet are clinically well, it makes one believe that, by the use of the telephone, on account of the close prox-

imity of the mouth, it is possible for infection of various kinds to be deposited upon the transmitter, and that persons, during inhalation while using the instrument, might become infected.

In order to positively ascertain if such conclusion was correct, during the early part of the present year, experiments were inaugurated along the following line: statistics show that the diphtheria bacillus is contained in the throat of about one person in each one hundred. If this be true, and there is no reason to doubt the accuracy of the statement, it is fair to suppose that telephones situated in such localities as the Hotel Iroquois, the Genesee Pharmacy, the Tifft House and the Genesee Hotel, would, during a period of constant use, become infected with this organism.

The telephones in these localities are used by many hundreds of persons during each day, and in view of this fact, cultural examinations were made as follows:

Twenty-five cultures were taken, using sterilised swabs, the same being rubbed around the entire inner surface of the transmitters. At the Hotel Iroquois, such investigation covered a period of four different days; at the Tifft House, three different days; at the Genesee Pharmacy, two different days; and at the Genesee Hotel, one day. It is fair to assume that, if the diphtheria bacillus was contained in the transmitters, a procedure of this character would demonstrate its presence. After most persistent search, it was impossible to demonstrate the presence of this organism.

It must be remembered, however, that the telephones in the locations mentioned, are kept in a cleanly manner, the transmitters being frequently wiped by the use of a dampened cloth. In view of these circumstances, it is fair to assume that by the use of telephones which are kept ordinarily free from dust, there is little danger of the transmission of disease.

ACUTE BRONCHITIS.

THIS prescription, credited in *Le Progres Medicale* to G. Lyon, appears to be a very good mixture for acute bronchitis:

R	Tinct squills	0.7	m x.
	Syrup codeia	20.0	℥ v.
	Ext. hyoscyamus	0.06	gr. i.
	Orange-flower water	10.0	℥ ii. ss.
	Julep	120.0	ℨ iv.

Mix. Dose—One dessertspoonful.

SELECTIONS.

Carcinoma of the Cervix Uteri.[1]

SUMMARY REPORT OF THE AUTHOR'S SIXTY-TWO CASES OPERATED UPON BY HYSTERECTOMY. REMARKS.

By L. H. DUNNING, M. D., Indianapolis, Ind.

(*American Journal of Obstetrics, December, 1902.*)

IN presenting a report of all the cases of cancer of the cervix uteri operated upon up to the date of the present writing—September 1, 1902—the author desires to state that he has excluded from this list all the cases in which a question arose in his mind as to the diagnosis of carcinoma. All but very few of the cases were examined by competent pathologists and pronounced carcinoma, and those not examined presented unmistakable signs of malignancy, such as pain, hemorrhage, and a fetid discharge with the presence of neoplasm which was either fungoid or undergoing ulceration. There were in all 62 cases, and of these 18 are known to be alive. There were 5 deaths resulting from the operation, and one died at the end of ten years and three months.

The list has been divided into two groups, the first group including all cases operated upon previous to September 1, 1898, five years ago. In this group there are 30 cases, of which 5 (16 2-3 per cent.) lived longer than five years. A brief history of these five cases is herewith submitted. By this report it will be seen that one lived ten years and three and a half months. One is alive and well at the end of six years and seven months, one at six years and eleven months, one at six years and four and a half months, and one at five years and nine months.

The second group includes those cases operated upon within the last five years. There are 32 cases in this group. Of these, 14 are still living. One is alive four years and four months after operation, one four years and three and a half months, one four years and one and a half months, two three years and ten months, one one year and ten months, one one year and seven and a half months, one one year and six months, one ten months, one nine months, one eight and a half months, one six and a half months, one five months, and one four and a half months.

1. Read at the meeting of the American Association of Obstetricians and Gynecologists, Washington, D. C., September 16, 17, and 18, 1902.

All of these who have lived over three years have been examined either by myself or attending physician and found to be free from a recurrence. I cannot speak positively of several patients operated recently, other than to say that they do not present at present any symptoms leading to a fear of recurrence.

In this report all cases are excluded in which we knew portions of the cancerous mass were left behind. In our attempts to do thorough work we sometimes jeopardised other tissues. Once a portion was cut out of the bladder and the opening was successfully sutured. Twice we caused rents in the bladder. One occurred in one of the fatal cases, and in the other case the rent was closed by a subsequent operation before the patient left the hospital. The patient died, however, of a recurrence within six months.

In three cases one ureter was severed. In two of them the corresponding kidney was extirpated. In the first, which occurred in 1893, the prognosis was unfavorable and I knew of no better way of procedure. The patient recovered from both operations, but died three months later of recurrence. In the second case I urged an abdominal section, the dissecting out of the ureter and the grafting of it into the bladder. The patient rejected this method in favor of nephrectomy. The patient is still living and seemingly well at the end of two years and eleven months. In the third case of severed ureter a rapid recurrence took place, the open end of the ureter became blocked by cancerous deposits, a hydronephrosis developed, yet the patient lived many months.

In several patients operated upon there was slight extension of the disease to the vagina. If the vaginal involvement is superficial and not more than one inch below the uterovaginal junction, it is no bar to hysterectomy.

The author has several times extirpated the upper portion of the vagina, both by the lower and upper methods. When the work is done through the vagina an incision may be made through the coats of the vagina below the growth, far enough away to enable one to seize with a forceps healthy vaginal tissue. Now, by traction upon the forceps and finger pressure beneath the vagina, between it and the underlying structure, the vagina and neoplasm may be stripped up to the cervix.

In two or three instances I have first severed the vaginal attachment to the uterus and then stripped off portions of the vagina by forceps, traction, and finger pressure from above

downward. The former method, however, is the preferable one. The suprapubic method is certainly the preferable one when the uterus and upper portion of the vagina are to be removed.

In all five of the cases that have survived for five years and longer the disease was in its incipiency. There were two, however, in the second group—viz., the one alive at the end of four years and three and a half months and the one alive at the end of four years and one and a half months—in which the disease was so far advanced that I deemed it questionable, at the time of examination, whether the operation would be of any avail. The first was an adenocarcinoma of the cervix and the operation a vaginal hysterectomy. In attempting to draw the uterus down the cervix was torn off, so that the operation was greatly embarrassed. The case proved to be one of the most satisfactory in the list.

The other case was one of a large cauliflower growth of the cervix attended by much bleeding, fetid discharges, and marked emaciation. This patient is now enjoying good health without recurrence. These are exceptional cases. In the review of my experience I am greatly impressed with the necessity of early operation, if we desire to benefit the greater number of patients.

Vaginal hysterectomy was the method of operation in all but five cases. In the five cases in which supravaginal hysterectomy was done, a technique very similar to the one proposed by Werder was employed. The pelvic glands were removed in two cases only. One case out of the five was fatal, and in this case the operation was most difficult and quite prolonged. The left ureter was torn off near the bladder. [See note.] Fortunately

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[Note.—In a recent supravaginal hysterectomy I resorted to a simple method which yielded me such admirable results that I shall employ it in the future whenever possible.

The case operated upon was one of carcinoma of the cervix in which the neoplasm extended well over toward the right lateral pelvic wall, yet it seemed just above the vaginal tissue, and the uterus and neoplasm moved freely, so I thought it possible to easily extirpate the uterus and neoplasm.

After opening the abdomen and working my way down to the neoplasm, the latter was found more extensive than we at first thought. It seemed to me the ureter was in danger. The patient was in the Trendelenburg position, and the intestines held above the pelvic brim by gauze packing. The ureter, as it came over the brim of the pelvis, was in plain view. The peritoneum lying over it was incised a distance of one-half

the torn end of the ureter was found and transplanted into the bladder without difficulty. The result of this implantation we do not know, as the patient died at the end of two days and we were not permitted an autopsy. Only two of the remaining four patients are alive, one six and a half months and one five months after the operation. It seems to me that the question of methods is still an unsettled one.

Certainly the supravaginal operation with extensive dissection of glands and broad ligaments is attended with a larger rate of primary mortality, and the method has not been employed long enough to determine its relative merits in effecting a cure. Theoretically it appears the most promising.

Leopold's researches show that even at a comparatively early stage of the disease too much reliance cannot be placed on this alleged immunity of dissemination, for of 127 cancerous uteri extirpated per vaginam he found dissemination in the parametrium in 68, or 54 per cent., the disease being limited to the uterus in the other 59 cases.

Mackenrodt has arrived at similar conclusions.[1]

Roger Williams's[2] post-mortem findings showed the largest per cent. of involvement of vaginal tissue by extension, viz., 72 per cent. These findings lead us to hope for a greater number of cures when a few years more have passed and we can obtain tabulated reports of cases operated upon by the Werder method. Every supravaginal hysterectomy for cancer of the cervix should include in the procedure the removal of a portion of the upper part of the vagina, especially anteriorly, since this is the most frequent direction of the extension.

1. Roger Williams. Uterine tumors, p. 213.
2. Ibid., p. 224.

inch. The peritoneum was dissected off the ureter, a blunt needle threaded with catgut was carried under the ureter, and a single knot was carried down to near the ureter, but not tightened. By slight upward traction it was found to put the ureter on the stretch, so that it could be felt as a cord all the way from the thread encircling it to its entrance into the bladder.

To my satisfaction I thus demonstrated that the neoplasm in the cervix lay below the ureter, and that with a little care there was no danger of wounding it.

When the uterus was extirpated the catgut thread was cut and removed and the incised peritoneum stitched. It seems to me this simple method could be used with marked advantage in many cases of operation upon neoplasms in the pelvis in which there is danger of wounding the ureter.

Vaginal hysterectomy for cancer of the neck of the uterus has yielded me 16 2-3 per cent. of cures, taking the five years time test as the standard of computation. This is a percentage corresponding to that obtained at John Hopkins, as recorded by Cullen in his work, Cancer of the Uterus, (pp. 632 and 633). By consulting his table of cases of squamous-celled carcinoma of the cervix uteri, it will be seen that the whole number operated upon five years previous to the time of his report was 14. From this number two should be deducted, as they were incomplete operations. There are thus left 12 cases operated upon, and 2 of these were alive and well at the time of making the report, thus showing a percentage of recovery of 16 2-3 per cent.

The number of cures is not a complete index to beneficial results of operations for cancer of the uterus. The prolongation of life in many cases, and the relief of suffering, hemorrhage, and offensive discharges, must pass for much in favor of surgery. The writer's experience teaches him, however, positively the uselessness, the harmfulness of hysterectomy in cases in which there is a wide dissemination of cancerous deposits and infiltrations. He has long since abandoned all efforts in this direction. He has, however, seen much temporary benefit result from curettage and the thorough application of the thermocautery.

Of late there has been some discussion upon the relative merits of hysterectomy and high amputation of the cervix in incipient cancer. Several years ago the writer, following the teachings of Schröder, employed high amputation instead of hysterectomy. He abandoned this method because of the incompleteness of the operation, and because of the sufferings of the patients afterward in those operated upon before the menopause. It is probable that amputation yields a slightly less primary mortality than hysterectomy, but the benefits in patients surviving the hysterectomy are much greater.

It should be remembered that in a considerable percentage of cases of cancer of the cervix uteri the body of the uterus is also affected by extension through the lymphatics, and in other instances the disease spreads rapidly from below upward. Obviously amputation of the cervix is inappropriate for such cases. The ovaries and tubes are quite often invaded, even in early cases. Here also amputation is inefficient.

The painful menstruation and pelvic congestion due to stenosis following amputation of the cervix are, as a rule, very

distressing and call for frequent intervention of the surgeon. Pregnancy and labor in such cases are distressing and too frequently dangerous.

We operate in cases of cancer to bring relief as well as to accomplish cures. To effect this double purpose hysterectomy is at present the best known means.

REPORT OF FIVE CASES OF CARCINOMA OF THE CERVIX UTERI ALIVE FIVE YEARS AFTER HYSTERECTOMY.

Case I.—Mrs. A., referred by Dr. Terrill, of Filmore, Ind., in January, 1892. The patient was 63 years old and had reached the menopause ten years previously. For several months she had had profuse uterine hemorrhages. Dr. Terrill had removed small growths from the cervix uteri several times, but new ones had quickly sprung from the site of the former ones. At the time of my examination there was a small cauliflower growth springing from the cervix and protruding into the vagina. A portion of it was examined by Dr. Ferguson and pronounced carcinoma. Vaginal hysterectomy with extirpation of the appendages was done January 4, 1892. The patient recovered. She enjoyed good health until May, 1899, when she had a slight stroke of paralysis. She made a partial recovery from this attack and died March 20, 1902, of hydrothorax. No post-mortem was made. There were never any evidences of a recurrence of the carcinoma in the pelvic tissues.

Case II.—Mrs. B., married and aged 30 years, was referred by Dr. J. R. Mauk, Cambridge City. She was emaciated as a result of uterine pain and hemorrhage. A neoplasm was found involving the cervix uteri. Dr. C. E. Ferguson examined a portion of the neoplasm and pronounced it carcinoma. A total extirpation of the uterus and appendages was effected January 30, 1896. The patient recovered from the operation and gradually regained her health. She enjoys reasonably good health and has for a number of years been employed as a stenographer. She has not been examined by me recently, but she makes no complaint indicating a recurrence.

Case III.—Mrs. C., referred by Dr. McNutt, of Connersville, Ind. She was 45 years of age. Examined by me December 2, 1896. She gave the history of frequent and profuse hemorrhages and now has a thin, fetid discharge. Upon examination a small papillomatous growth was found upon the posterior lip of the cervix. A piece was snipped out and examined microscopically and pronounced carcinoma. Vaginal hysterectomy was done December 3, 1896. The uterine appendages were also removed. She made an excellent recovery and today is well. I have examined her recently and find no evidences of recurrence.

Case IV.—Mrs. D., referred by Dr. H. Jameson. The patient was 48 years of age, mother of four children, youngest 17 years. A neoplasm involving one-half of the circumference of the cervix uteri was found upon examination. Microscopic examination showed it to be a squamous-celled carcinoma. Hysterectomy was done April 16, 1896. Patient made an excellent recovery. She reported to me by letter August 16, 1902, as being well and as having no signs of recurrence.

Case V.—Mrs. E., about 40 years of age. Referred by Dr. E. F. Hodges. Patient married and mother of two children. Microscopical examination of cervical neoplasm was made by Dr. Hodges, who pronounced it carcinoma. A vaginal hysterectomy was done October, 1895. Patient was in ill health for some months following the operation. She has been in comparatively good health now several years. The writer examined the patient in July of this year and found a clean vagina with no signs of recurrence.

Management of Breech Presentations.[1]

By WILLIAM D. PORTER, M. D., Cincinnati, O.

(*American Journal of Obstetrics, December, 1902.*)

BREECH presentation is encountered once in about fifty cases of labor. A much higher ratio represents its pro rata agency in inflicting damage on the mother, in causing injuries to the child, and particularly in the production of fetal mortality. The mortality is variously estimated at from 10 to 35 per cent. The percentage of children that die in the twenty-four hours succeeding birth is also high. It is difficult to determine what proportion of the deaths is due to the presentation *per se*. Many of the labors are premature. A change from breech to head presentation occurs late in some pregnancies. In case of premature labor with breech presentation, dystocia incident to the presentation may cause death of the child. It may be due wholly to the premature labor, which anticipated a possible change to a vertex presentation. But it must be admitted that the presentation may cause the premature labor. The breech seldom enters the pelvis in advance of labor, which may be precipitated from lack of space. The principle is the same as that which explains the frequency of premature labors in cases of contracted pelves.

Primiparity is an important factor of fetal mortality. The abdominal wall admits of less distension, making premature

1. Read at the meeting of the American Association of Obstetricians and Gynecologists, Washington, D. C., September 16, 17 and 18, 1902.

labor more probable. The soft parts dilate less readily. The vagina is less capacious. These conditions increase the difficulty both of labor and of manipulations, should the latter be needed.

Breech cases always require careful supervision and frequently there is urgent need of assistance. On the contrary, it is equally true that defective judgment as to whether interference is needed, and inferior skill in rendering aid, contribute in an unfortunate degree to the fetal mortality.

Breech cases are usually tedious. The position of the child is generally oblique. Its pelvis, held by the comparatively rigid portion of the spinal column, does not readily accommodate itself to the resultant of forces, as does the head under like conditions. Consequently the breech is likely to impinge against the brim near the anterior end of an oblique diameter. Much time and energy may be consumed in overcoming this obstacle.

The child's thighs are usually flexed. That the breech may engage, this flexion must be carried to an extreme degree. This is opposed by the resiliency of the tissues, reinforced doubtless by resistance on the part of the voluntary muscles. At a definite point in the labor the uterine efforts are expended in crowding the breech into the brim against this resistance. Promptly on the cessation of the pain the extension of the thighs lifts the breech out of the pelvis. The next pain is expended in doing the same work, which is as promptly undone. This seesaw will continue until finally the breech is driven so deep into the pelvis that the thighs are parallel with the body, and efforts at extension only serve to fix the breech more firmly.

The progress of the breech through the pelvis is necessarily slow. However, by the time the outlet is reached the distension of the vagina and vulva is so great that the reflexes stimulate the expulsive powers to their greatest effort. The reflexes are greater than when the head presents, owing to the greater mass within the vagina. Expulsive efforts of such power and rapidity are produced that the child is likely to be rapidly expelled, reducing its time of greatest peril to a minimum.

Serious delay in a breech case is likely to be at one of three points: (1) with the breech at the brim; (2) with the breech in the pelvis; (3) with the delivery of the head.

Delay of the breech at the brim may become a serious matter, particularly if the membranes are ruptured. The water readily escapes, and retraction of the uterine walls may occur to a degree sufficient to embarrass the uteroplacental circula-

tion. This is always a cause for apprehension, and particularly so in breech cases. For there comes a time when this circulation is suspended, owing to the compression of the cord by the chest and head as they pass through the pelvis. The ability to meet this ordeal depends largely on how well the blood is oxygenated before the ordeal begins. The principle is well exemplified in divers who give exhibitions which involve remaining under water for a comparatively long time. It is noticeable that, before undertaking such a feat, the blood is well oxygenated by a number of deep rapid respirations.

With the breech delayed at the superior strait, the usual teaching is to bring down one or both legs and make traction. This plan is excellent if the patient be a multipara and the cervix well dilated or easily dilatable. In case of a primipara, or of a multipara with the cervix imperfectly dilated and with evidence that the completion of the dilatation will require considerable force, it is a questionable procedure. With one or both legs in advance a wedge is formed whose sides taper so gradually as to form a powerful dilator. But its maximum diameter is insufficient to prepare the soft parts for the prompt passage of the head. If the resistance of the cervix is considerable, it will promptly contract when the shoulders have passed, and may cause a fatal delay of the head or a serious laceration of the cervix. Should the perineum form the chief resistance, the delivery of the head within a safe time limit will probably result in an extensive tear of the perineum and possibly of the vagina.

If greater dilatation can be safely secured before the head reaches the pelvis, there will be a manifest gain of possibly vital importance. Such a gain is inevitable if the thighs be allowed to remain flexed and the legs extended along the body of the child. If the breech is carried through the cervix and over the perineum, with the legs in this position, the dilatation is generally sufficient to permit the ready extraction of the head. Considerably more time is consumed by this plan than is needed if the legs are brought down. If interference has not been too long delayed this extra time is well spent. Minutes spent in extricating the head count for more than hours expended in bringing down the doubled breech. The cervix dilated in the slower manner, by the larger mass, is not so likely to contract about the child's neck. It would doubtless be better to do nothing in preference to bringing down the legs, though such an election would often be but the choosing of the lesser evil.

William Hunter, whose contemporary fame equaled that of his brother, the great John Hunter, was an able obstetrician and a noted teacher. At one time he advised bringing down the legs in the condition under discussion. He reasoned that by lessening the mass the dilatation would be easier and more gradual, and that the suffering of the woman would thereby be greatly lessened. In his later lectures he admitted the danger of his plan and advised strongly against it. In nearly every case in which he had brought down the legs he lost the child.

The best method of bringing down the doubled breech is to make traction over the anterior groin with a finger. In case of a multipara this is easily accomplished, particularly if only moderate traction is needed. If traction in this manner is not feasible or is inadequate, a broad tape or a handkerchief carried between the anterior thigh and the body of the child furnishes an efficient means of traction.

The objection is made that it is sometimes difficult to place the fillet in position. It is no more, or but little more, difficult than to bring down a leg. In placing the fillet the Trush forceps will be found a valuable instrument. The objection that injury has been done with the fillet is applicable to all obstetrical instruments and manipulations. If traction be made in the proper direction the force is expended largely on the pelvis rather than on the femur. Moderate traction in conjunction with the pains will, as a rule, insure gradual descent.

Delay may occur with the breech in the pelvis. Almost invariably the thighs are flexed. The mass is about as great as the pelvis can accommodate. It does not readily bend and adjust itself to the pelvic curves. This is partly due to the resistance of the inflexible thighs. Uterine inertia from exhaustion is also a possible cause of delay.

Robert Barnes taught[1] that delay, with the breech low, often gave rise to serious difficulty. He advised against direct traction on the breech in all cases, claiming that it is frequently unsuccessful, and if so, does harm. His treatment was always to bring down a leg. This procedure he terms breaking up or decomposing the obstructing wedge. With the breech low in the pelvis it is difficult to bring down a leg. And notwithstanding the high authority, it would seem to be unnecessary.

The use of forceps on the breech is advocated by men of recognised ability. If only slight traction be needed they are

1. Obstetric Operations.

doubtless safe and satisfactory. They are so poorly adapted to the shape of the pelvis that it is difficult to regard them as appropriate in cases demanding much assistance. Traction on the groin with the finger, or, if necessary, with the fillet, seldom fails to overcome the delay.

As the body of the child is delivered it should be enveloped in a warm towel. This insures a secure grasp, conserves the child's heat, and lessens the danger of premature efforts at respiration.

As the body is extracted it is well to remember that the shoulders should enter an oblique diameter of the pelvis. To keep the spinal column directly under the pubic arch, as is pictured in many of the textbooks, is to force the shoulders to enter the transverse diameter. with the not remote danger of fracturing a clavicle.

Among the various procedures for delivering the after-coming head, that known as the Deventer method has the sanction of good authority. With the woman in the lithotomy position, as soon as the shoulders appear, traction vertically downward is made, one hand grasping the feet and the other making traction over the shoulders. The arms are undisturbed and are usually found placed along the sides of the head. The claim that by this method the head is delivered in full extension is hardly credible. The normal position of the head is that of flexion, due to the pronounced curve of the spinal column of the child *in utero*. In this position of flexion the head will in all probability enter the pelvis, unless extended by awkward efforts at suprapubic pressure. The explanation of Reynolds[1] that the chin is arrested on the pelvic floor, causing the head to become extended, is not tenable. It may be stated as an inflexible law that, with the head in the pelvis, a change from flexion to extension or from extension to flexion is a physical impossibility.

The so-called Prague method, but which Parvin attributes to Puzos, involves traction by the feet and shoulders, first downward and backward till the head enters the pelvis; then upward and forward, bringing the back toward the mother's abdomen as the head is delivered.

"The combined method" seeks to diminish traction on the neck and to insure flexion by pressing two fingers against the superior maxilla. This method is variously attributed to Smellie, to Veit, and to Mauriceau. Others claim to effect the

1. American Textbook of Obstetrics.

same results by traction on the inferior maxilla with one or two fingers in the mouth.

Pressure over the fundus is a most valuable adjunct, whatever method be selected.

A matter of great moment is the amount of traction which can safely be exerted through the neck. This is estimated by Matthews Duncan, from experimental data, to be about 105 pounds. Goodell, from clinical experience, placed the estimate still higher. I have seen fatal injuries to the soft structures of the neck with much less traction than the estimates above given. Where such tremendous force is necessary the forceps is certainly safer and its application is a matter of seconds. For even with an obstruction at the brim, we must remember that most of the head enters the pelvis before resistance is encountered. In this condition the application of forceps is easy.

The method of delivering the head which I have found most satisfactory (though it has no original features) is as follows: After delivery of the breech, bring down the legs and grasp them, enveloped in a towel, with the left hand, making traction. Make pressure over the fundus with the right hand. The importance of this pressure cannot be overestimated. To get the best results from such pressure the woman should be anesthetised. When the shoulders appear the arms should be swept down over the face. As the head enters the pelvis it should be crowded down with the hand, keeping the pelvic curve in mind. If additional force is needed an assistant may make pressure over the fundus. Ordinarily the pressure and traction can be better timed and regulated by one person than by two. Moreover, the proper axis in which to make traction can be more accurately determined with this bimanual method. And, with all respect for the opinions of those who attribute failure to the lack of sufficient flexion, it appears more rational to explain it by traction in a wrong axis.

The possibility of a large head or of a pelvic contraction should be anticipated by having the forceps always in readiness. If there is reason to believe that great traction will be necessary, the patient should be placed on a table of good height. The advantage of occupying a seat lower than the hips of the patient is equaled only by the satisfaction of having a firm, unyielding support for the hips. With the hips on an ordinary mattress it is necessary to vary the direction of traction with every change in the amount of traction.

To consume time in attempting to supply air to the child before delivery of the head is to forget what should be an obstetrical motto: "If in a given case it is possible to deliver the after-coming head, it can and must be done with promptness."

Curettement of the Uterus.[1]

By GEORGE BEN JOHNSTON, M. D., Richmond, Va.

(*Richmond Journal of Practice, September, 1902.*)

I HAVE but one purpose in presenting this brief paper and that is to utter a warning against the misuse of the uterine curette. I shall make two contentions: (1) that the practice is far too frequently resorted to; (2) that it is in many instances both useless and harmful and in some dangerous.

To support my first proposition, I quote the records of the gynecological department of one of the leading hospitals in a neighboring state, taken from the hospital report for the year 1901.

There were admitted into the gynecological wards, 293 women. Of these 165 were subjected to the ordeal of curettement. It is inconceivable that 50 per cent. and over of all women presenting for gynecological treatment require curettement, and if I could furnish no other argument in support of my first proposition, this record would supply it. But I could show from my own records many cases in which the operation was unsuitable and unjustifiable and produced serious troubles, for which the patients sought my aid.

In properly chosen cases and when skilfully performed, curettement is a most valuable procedure and no other manipulation can take its place when rightly indicated, but the indications for it should be as pointed, as definite and as well understood as for any other surgical undertaking. Its application otherwise for the relief of vague and ill-defined symptoms without a clear diagnosis indicating its performance is unjustifiable and wrong.

The conditions to which it is applicable are very limited and may be enumerated as follows: (1) for purposes of diagnosis; (2) to cleanse the uterus after incomplete abortion; (3) to remove cancerous tissue in otherwise inoperable cases; (4) for the ablation of polypi and small submucous fibroids; (5) in endometritis.

The operation bears a false reputation. It is regarded as an insignificant and safe operation. This is unfortunate, for such an estimate leads to its abuse.

1. Read before the thirty-third annual session of the Medical Society of Virginia, held at Newport News, Va., September 23–25, 1902.

It is not an easy matter to thoroughly curette the uterus; on the contrary, great skill is required to achieve proper results. Any one may remove some diseased tissue from the cavity, but without thoroughness and completeness in the operation it becomes of no avail and for this a trained hand is essential.

Except in so far as it does not usually immediately endanger life, it is not a safe procedure, but its performance is attended by many dangers, mechanical and inflammatory. Of mechanical dangers, laceration of the cervix in the course of necessary dilatation is not uncommon and perforation of the uterus by the dilator or the curette or by the probe in packing is a serious menace. When one considers the natural uncleanliness of the field of operation and the notoriously difficult task of rendering it even approximately aseptic, it is at once evident that infection and subsequent inflammations are a threatening danger in this operation. Metritis and cellulitis are the milder inflammations met with, but it is not infrequently that we encounter the more serious forms of salpingitis and peritonitis. Undertaken in the presence of pelvic inflammation, it may light up an old inflammation or cause the further extension of one already in progress. I have seen every one of these misfortunes follow the untimely and unskilful application of the curette and have repeatedly had occasion to remove pus tubes, which were directly traceable to faulty or unnecessary curettage.

If I were called upon to formulate a set of rules governing the operation of curettement, I would announce them as follows: (1) have a distinct and sufficient reason for the procedure; (2) observe a most scrupulously perfect technique as to asepticism; (3) dilate the cervix slowly and thoroughly, under complete anesthesia; (4) apply the curette with great gentleness, but completely and thoroughly removing all diseased tissue; (5) conduct the subsequent dressings and after-treatment with the same rigid care that appertains to other surgical operations.

When applied for the purposes indicated, the results are satisfactory—even brilliant. Resorted to, however, as is often unfortunately the case, without a specific object in view, upon a vague and inadequate diagnosis and unskilfully practised, its results are disappointing and even disastrous. The operation fails or is mischievous when the reason for it is not well defined in the absence of a perfect technique and when the curettement is not thorough.

PROGRESS IN MEDICAL SCIENCE.

Therapeutic Notes.

EDITED BY NELSON W. WILSON, M.D., Buffalo, N.Y.

THE PREPARATION OF KOUMYSS.

ONCE in awhile it is advisable to make koumyss, on which occasions the following method of preparation as given by H. V. Sachse, in How to Cook for the Sick, is the best:

Heat two quarts of milk to 100° F., or pasteurise and cool to 100° F. Dissolve one-third of a yeast-cake in two tablespoonfuls of the milk, boil two tablespoonfuls of sugar with three tablespoonfuls of cold water, mix all together and bottle at once. Cork firmly and stand in a warm (70° F.) place over night. Next morning place the bottles carefully on their sides in a cool place for twenty-four hours. Open with a tap, or use ordinary beer-bottles.

FOR ACUTE RHEUMATISM.

F. L. SATTERLEE, in Rheumatism and Gout, goes into the treatment of acute rheumatism very thoroughly and lays down a routine plan which is, in many cases, really remarkable for the results it achieves. In two cases recently treated, according to Satterlee's ideas there was a most gratifying outcome. In the beginning he gives a chologogue for the reason that the bile in rheumatism is always acid when it should be alkaline in reaction. The acidity he ascribes to biliary stasis and uric acid accumulation. The chologogue given is as follows:

℞	Euonymin	0.015	gr. ¼
	Podophyllin	0.008	gr. ⅛
	Aloin	0.008	gr. ⅛

Dose—One such tablet night and morning as required.

Now, alkalies are indicated and the best are the sodium salts. The best borne combination is:

℞	Benzoate of lithia	2.0	ʒ ss.
	Bromide of soda	8.0	ʒ ii.
	Carbonate of potash	8.0	ʒ ii.
	Acetate of potash	45.0	ʒ iss.
	Phosphate of soda	15.0	ʒ ss.
	Syr. ginger, peppermint water, equal parts of each to make	180.0	ʒ vi.

Mix. Dose—Two to four teaspoonfuls in water every four to six hours after food.

If deemed advisable bicarbonate of soda may be given, or this alkaline mixture:

℞	Bicarbonate of potash	12.0	ʒ iii.
	Distilled water	240.0	℥ viii.

Mix. Dose—Teaspoonful to half an ounce of fresh lemon juice, to be drunk while effervescing.

It is important to remember to keep up the alkalies until the urine and sweat do not show acid reaction to blue litmus paper. When this stage has been reached small doses will serve to maintain the proper condition of alkalinity of the system. Salicylates are never employed, for the reason that they tend to produce relapses, cardiac depression and cerebral and gastric irritation. In the event of fever use antipyrin, antifebrin or phenacetin with great caution. To give quinine is worse than giving no treatment at all. It is absolutely and hopelessly useless. If the antipyretics are not sufficiently analgesic, and in the majority of cases they will be sufficient, morphine may be used, especially when natural and painless sleep is urgently needed by the patient. Then this may be given at one dose:

Sulphate of morphine	0.015	gr. ¼
Bromide of potash	2.0	gr. xxx.
Chloral hydrate	1.3	gr. xx.
Syrup of orange peel	8.0	ʒ ii.
Water, to make	30.0	℥ i.

Vichy is the most serviceable of the mineral waters as a vehicle and Rubinat Llorach acts best on the liver. By this time the acute symptoms have subsided and now the heart needs tone. There are several mixtures suggested by various authors for this stage, but the best are these:

℞	Aromatic spirits of ammonia	90.0	℥ iii
	Carbonate of ammonia	4.0	ʒ i.
	Tinct. cardamom	30.0	℥ i.
	Tinct. nux vomica	12.0	ʒ iii.

Mix. Dose—One teaspoonful in water three times a day.

℞	Tinct. chloride of iron	15.0	℥ ss.
	Tinct. nux vomica	8.0	ʒ ii.
	Dil. phosphoric acid	8.0	ʒ ii.
	Syrup orange peel	30.0	℥ i.
	Elix. calisaya	60.0	℥ ii.

Mix. Dose—One teaspoonful in water half an hour before meals.

As a rule one will find excessive thirst. This is best met by the free use of lemonade or water. As to diet, it should be

limited largely to milk, chicken or clam broths, and vegetable soups. When the return to solid food is permitted white meat only should be given at first with such vegetables as celery and asparagus.

The majority of patients will not only ask for a liniment but in many cases demand it and not feel satisfied unless they have a topical application. The best is this:

℞	Tinct. aconite root	15.0	ʒ ss.
	Tinct. arnica	15.0	ʒ ss.
	Chloroform	30.0	ʒ i.
	Camphorated soap liniment	60.0	ʒ ii.

Mix. Directions—Apply on lint or rub joint well and cover with cotton.

In closing, great stress is laid on the efficacy of blistering when the inflammation results in effusion into a joint.

TUBERCULOSIS IN CHILDHOOD.

RACHFORD (*Archives of Pediatrics*) says the importance of diet becomes greater the younger the victim, and the necessity for artificially feeding infants complicates the problem. In cases under a year old he begins by feeding Nestle's food alone, and when the stools become normal adds cod-liver oil, pure or in emulsion, to several of the feedings each day. As the patient's condition improves, he gradually substitutes modified cow's milk. He also adds the white of one egg to one bottle of the food, and the yolk of an egg to another. In older children milk and cod-liver oil are the staples, and fresh eggs, good beef and poultry, cereals, fresh fruits, and well-cooked vegetables may be added as age permits. Fresh air and sunshine should be obtained for as much of the day as possible. He uses the following inunction:

℞	Guaiacol	4.00	ʒ j.
	Lanolin	8.00	ʒ ij.
	Lard	20.00	ʒ v.

M. Sig.: One level teaspoonful to be rubbed into chest daily at bedtime. This may be applied also over tuberculous lymph-nodes or over the abdomen in tuberculous peritonitis. The carbonate of guaiacol may be given internally, though creosote is preferred. Creosote may be given in capsule or by inhalation.

℞	Tinct. gentian	6.00	ʒ iss.
	Creosote	2.00	ʒ ss.

M. Sig.: Three to five drops in a capsule and take every six hours, followed by a drink of milk.

℞	Tinct. camph. opium	8.00	ʒ ij.
	Creosote	8.00	ʒ ij.
	Alcohol	16.00	ʒ iv.

M. Sig.— Five to fifteen drops in creosote inhaler; use fifteen minutes three times a day. The iodide of iron, arsenic and malt containing diastase, may each have their indications.

BRONCHITIS WITH BRONCHOPLEGIA.

A. MARTINET (*La Presse Médicale*) says in treating bronchitis the two general indications are to lessen the cough and diminish the bronchial secretion. But a third indication, sometimes of great importance, is to combat bronchoplegia, the paralysis of the smooth muscles of the bronchi. This may be due to the toxins of certain infectious diseases, diphtheria, influenza, and the like, or may be produced by mechanical causes in the course of chronic bronchitis. There is gradual progressive dyspnea with ineffectual cough, accumulation of secretions and congestion. In such a condition an opiate or other sedative might do great harm, drugs that will stimulate the nervous system and reawaken the bronchial contractility being required. A cardiotonic and hemostatic pill of value is:

℞	Ext. hyoscyami	0.3	gr. v.
	Quin. sulph.	1.5	gr. xxiv.
	Ergotin	3.0	gr. xlv.

M. Ft. pil. No. xxx. Six or eight pills a day.

Rénaut's treatment of bronchitis is to give balsamics (terpin, syrup of tolu or Canada balsam, Venice turpentine, and the like) for the first four days; then for three days to give ergotin in suppository with opium or hyoscyamus, and at the same time pills of

℞	Ext. hyoscyami	0.3	gr. v.
	Terpin	3.0	gr. xlv.
	Ergotin	1.5	gr. xxiv.

M. Div. in pill No. xxx. Two or three a day.

In the bronchoplegia of grip, strychnin is the most useful remedy:

℞	Strych. sulph.	0.03	gr. ss.
	Ergotin	1.5	gr. xxiv.
	Quinin. sulph.	3.0	gr. xlv.

M. Div. in pil. No. xxx. Take every two hours with a hot infusion sweetened with syrup of tolu and containing a teaspoonful of old brandy.

INHALATIONS OF ANTISEPTICS IN TUBERCULOSIS.

Ever since the discovery of the specific cause of tuberculosis, constant efforts have been made to treat the disease by attacks on the bacilli, writes H. C. Wood, Jr., in *American Medicine*. The futility of giving antiseptics by the mouth with the expectation that they could reach the lungs through the blood, becoming evident with advancing knowledge, attempts have been made to reach the lungs directly through the trachea. The methods which have been employed to introduce drugs into the lungs are intratracheal injections, atomisation of watery or oily solutions, and converting the antiseptics into respirable gases. The last of these has received, recently, considerable attention, especially among German physicians.

One of the most recent contributions on this method of treating tuberculosis is a long and interesting paper by Rudolph, in which it is claimed that the failure of the treatment to achieve popularity is owing to deficiencies in apparatus. He points out the faults of the various appliances used for the purpose, including the steam atomiser of Siegle, the simple but useful device on the principle of the washbottle, and the complicated arrangement of Jahr, ending with a description of a new model which excels them all, at least in complexity. An examination of the instrument is better than a lengthy description of this apparatus, but we would point out that it is fundamentally a series of washbottles, connected with long, spiral tubes, the advantage of which is not apparent, nor is it mentioned in the text. The only real difference in Rudolph's apparatus from the common bottle-inhaler is that the air is forced through by a rubber bulb instead of being drawn through by inspiratory force, and as complex as it is, we cannot see why the same results could not be procured by simply attaching a double bulb to the bottle-inhaler.

Nevertheless the inventor has demonstrated that the air that comes out through his apparatus has distinct germicidal power if the bottles are filled with a volatile antiseptic, as guaiacol or acetic acid. He has also shown, chemically, that the vapors will pass into all portions of the lung of an animal breathing this air. He offers, however, no proof of the really essential question as to whether the vapors are not so diluted by the residual air of the lungs as to lose their germicidal properties. In fact, his own statements tend to show that they do lose their powers, for he affirms that his patients continued to expectorate

tubercle bacilli even after a prolonged course of treatment. It is our belief that none of the present known disinfectants can be introduced into the lungs in sufficient quantity to be active without exercising a deleterious effect on the delicate pulmonary structure or causing a general intoxication; and we must further confess to grave doubts that any such antiseptic will ever be discovered, because all such bactericides are of necessity protoplasmic poisons and bound to affect the protoplasm of the patient as well as of the bacterium. Any improvement which follows the inhalation treatment of tuberculosis is more justly attributable to the effect of the drug on the mucous membranes than on the tubercle bacilli.

Genitourinary and Syphilitic Diseases.

CONDUCTED BY BYRON H. DAGGETT, M. D., Buffalo, N. Y.

RETENTION OF URINE AND ITS RELIEF.

BRINTON, JOHN H., (*Therapeutic Gazette*, November 15, 1902,) says retention of urine is of frequent occurrence and its relief is some times readily and easily effected, at other times it is most difficult, demanding the highest skill.

Prior to the classic utterances of Sir Henry Thompson, textbook instructions were vague and the choice of instruments was at haphazard. Little attention was paid to the differing pathological causes of retention and methods were governed by the "rule of thumb." In later years there has been more careful study and investigation of the varieties and nature of pathological changes leading to retention as well as a better selection of suitable instruments, and full appreciation of their use.

Causes of Retention.—Mechanical, such as ligature or ring around the penis, a calculus or some solid substance in the canal, abnormal erotic freaks. Such obstructions must be removed. Retention may be dependent upon acute inflammatory engorgement of the prostate, caused by gonorrhea. Congestion of the lateral prostatic lobes may cause complete retention by pressure on the urethral canal. Some variety of soft catheter should be used, either the elbowed catheter of Mercier, made of silk or linen or rubber, or Nélaton's straight soft rubber instrument. [Tieman makes a soft rubber elbowed catheter—a very useful instrument.—ABSTRACTOR.]

The proximal end of the catheter should be soft so as not to bruise the swollen and tender urethral wall. The distal three-fourths of the catheter may be stiffened by inserting a small round whalebone to within 1½ to 2 inches above the eye, and fastened to the catheter by a thread about the outer end. The urethra should be injected with olive oil and the patient placed in a recumbent position. The catheter of Mercier should be pushed down with the beak projecting upward, and when soft resistance is felt some pressure is used to traverse the obstruction, the shank or body of the instrument made rigid as stated above. A new woven catheter possesses the necessary rigidity. These whalebones may be found in a ladies' trimming store; they are about the size of a large knitting needle and two feet long. The lower end of the whalebone should not come within two inches of the catheter eye and should be firmly fastened at the distal end of the catheter. Recurrence of the acute prostatic inflammation does not often happen.

Retention produced by organic stricture.—This usually follows a gonorrhea of long standing and develops gradually. After a time the catheter is occasionally used. Pain is caused by urination. Dribbling and straining occur with each effort to urinate; this continues until the urine cannot pass at all; then surgical aid is sought. Retention due to stricture demands immediate relief, requiring skill and tact on the part of the surgeon.

A great deal has been and even now is said concerning "impermeable or impassable stricture." Limiting the word "stricture" to the pathological obstruction of the urethra, the result of idiopathic cause, or gonorrhea, and excluding traumatic stricture following wounds or surgical operations, I do not believe that there is such a thing as impermeable or impassable stricture. As to the socalled impermeable variety, I believe the urine will always pass,—it may be in a tiny stream or drop by drop, but still it passes; in other words, the stricture is permeable. In regard to the much talked of "impassable" form of stricture, I cannot admit its existence, except in the traumatic variety of stricture. With this exception, wherever and whenever the urine passes downward along the urethra, an instrument of some sort can be passed upward into the bladder, provided, however, that the exigencies of the case do not limit the time for surgical manipulation. In this form of stricture there is always a channel,—it may be narrowed and contracted,

but still it exists in continuity. On the other hand, in a traumatic stricture (if truly impassable) the urethra may have been lacerated or severed, and the ends of the canal superimposed or distorted and displaced. The continuity of the canal may have been interrupted to such a degree as to forbid the passage of instruments.

In dealing, then, with an organic idiopathic stricture, the result of an old gonorrhea, it is well for the surgeon to start with the idea that it is passable by an instrument,

I prefer filiform bougies for treating these strictures, over which the tunneled catheter of Gouley may be passed. The filiforms found in the stores are not as satisfactory as those I make from round whalebones of commerce. The ready-made filiforms may be made more flexible at the point by scraping with a knife. The olive-shaped tip of the home-made instrument can be shaped by scraping with a knife and polished with emery paper, tacked on some firm surface. Filiforms should have flexible, capillary and pliable extremities in order to detect and enter the minute openings of the strictured canal.

In treating stricture we assume that every organic stricture is due to the submucous deposit of organised lymph about some portion of the urethral circumference. This organised lymph constitutes the stricture, while the mucous membrane is puckered and drawn in by it and in such a stricture there is always a channel of some sort for the passage of urine in a greater or less quantity. The distal orifice of this narrow channel may be situated at any portion of the urethral circumference. It always exists and can always be penetrated by a filiform. If the probe point of the filiform can be made to enter the orifice of the channel, it will pass through and another can be passed beside it, thus enlarging the canal and preparing it for further surgical treatment. If more than one stricture is found, the filiform readily passes through into the bladder.

In addition to the filiforms the operator should have three or four Gouley tunneled sounds or catheters, in size from 8 to 16, French.

Before introducing the filiform inject olive oil into the urethra, draw the penis tense and pass the instrument with a rotary motion. If it will not readily pass the stricture, insert another and continue until half a dozen are introduced, and then manipulate one after another until the orifice is found.

If the opening is not found change position to the other side of

the patient and withdraw the bundle of filiforms half an inch and begin again, pushing forward gently and consecutively each filiform in turn with a slight rotary motion. There is every chance, 99 in 100, that one will pass, then over this pass the tunneled sound or one or more of the filiforms. If the stricture be tight or irritable, it is well to tie in filiforms and leave them over night.

Retention from Senile Enlargement of the Prostate.—Senile enlargement of the prostate is due to abnormal development of its glandular and cellular structures and generally all portions of the prostate are simultaneously affected, although it may involve only one lobe, which will distort and render the course of the urethra tortuous. Frequently the enlargement of the prostate upward and backward causes a ridge or bar at the neck of the bladder forming a pouch, or receptacle for retaining urine, which stagnates and decomposes, often giving rise to the formation of calculi.

Symptoms are impeded, slow, frequent and delayed urination, loss of force, drip, urinous odor and staining of clothes, increased amount and frequent, nocturnal micturitions and residual urine.

If retention occurs it must be relieved by catheterisation. If the obstruction be due to swollen lateral lobes the Nélaton catheter, with a sufficient shank and a soft, pliant point should be used. For the projection of the third lobe an upturned tip or a soft beak catheter is suitable. The Mercier elbowed catheter of silk, linen or rubber possesses these qualities and if stiffened in the shank is suited to all cases of senile enlargement.

"Much of the difficulty of catheterisation can be overcome by putting your patient in a proper position, and by occupying a proper position yourself."—Pancost.

In a bad case tie in the catheter.

NEPHROPEXY BY A NEW METHOD.

Beyer (*Pennsylvania Med. Jour.*, May, 1902,) after the usual incision and peeling of the fatty capsule, delivers the kidney through the wound and small rubber drainage tubes are passed through the perirenal fascia, one above and one below the renal vessels, drawn up around the kidney through the external wound and tied over a roll of gauze. These tubes remain in for three weeks and around them are formed connective tissue bands, which hold the kidney in place.

ABSTRACTS.

The Value of Gude's Pepto-mangan in Anemia.

Enrique Diago and José F. Benitez, both of Havana, in the *Progreso Medico*, April, 1902, say: anemia is a very common disease in Cuba and consequently one against which the physician is often obliged to contend in the practice of his art. While the use of the ordinary iron preparations often give all the effects that could be desired, yet they frequently produce a condition which may be regarded as a secondary disease—constipation. In looking about for a preparation which would not present this very serious disadvantage, which cannot always be counteracted by the coincident administration of laxatives, we came across Gude's pepto-mangan, which seemed a remedy worth a trial in a large series of cases. Accordingly, we began to treat all our cases of anemia, in which iron was indicated, with Gude's pepto-mangan. Our expectations were more than realised, when we noted its efficiency in combating the condition, and its perfect palatability and freedom from constipating after-effects.

One of the reporters, Dr. Benitez, chief of the laboratory of the hospital, kept minute records of all the cases observed, including a record of the amount of hemoglobin and of the number of the red blood-cells, both before and after treatment. Six cases are included in the statement from which we extract the following two as illustrations of the successful employment of the remedy:

Case I.—N.G., aged 26 years, was admitted to the hospital, suffering from loss of nutrition, emaciation, pallor of the skin and mucous membranes, loss of memory, anorexia, mental depression,—in a word, from all the typical symptoms of anemia. This condition was traced in his case to a chronic malaria, from which the patient had been suffering for a long time. The patient weighed only 102 pounds at the time of admission.

Pepto-Mangan (Gude) was given in doses of two tablespoonfuls twice daily at breakfast and at dinner respectively, with some cinchona wine. The first blood examination showed 2,400,000 red blood corpuscles c.m., by the Thoma-Zeiss method. Ten days after the beginning of the treatment, this patient, who had been so extremely pale when he entered, began to improve as regards the color of his cheeks and general appearance. His general well-

being was so marked that he spoke with pleasure of the great improvement in his condition which had taken place since he had been taking the new remedy at our hospital. In these ten days he had gained five pounds in weight and was able to walk around the ward without the lassitude which he had felt when he was admitted. The blood was examined a second time, showing an increase of 300,000 red blood cells. The patient was discharged cured after fifty days' treatment, weighing 130 pounds and with a blood-count indicating 2,800,000 red blood cells c.m.

Case II.—Mrs. C. D., aged 34 years, who gave a history of miscarriage, was admitted with the symptoms of anemia, secondary to the loss of blood occasioned by the accident mentioned. The chief symptoms were emaciation, loss of strength, and gastrointestinal disturbances. She weighed only 90 pounds when she entered the hospital, and her blood showed a marked diminution in the amount of hemoglobin, and only 2,300,000 red blood-cells to the cubic millimetre.

Gude's Pepto-Mangan was prescribed in the same doses as in the preceding case, and all went well until the tenth day, when the patient of her own accord, in order to facilitate the cure, and to accelerate the recovery, took five tablespoonfuls of the preparation during the day, causing a slight disorder of the stomach. The administration of pepto-mangan was thereupon discontinued, and tablets of bismuth and salol, together with a purgative were given. Five days later, the pepto-mangan was resumed, at first in doses of two teaspoonfuls, and two days later in doses of two tablespoonfuls. The further course of the treatment went on without any mishap, and the patient recovered completely. On leaving the hospital the hemoglobin was found normal, and the number of red blood cells was found to have increased to 3,500,000 c.m., while the patient's weight had increased twenty-one pounds within fifty days.

These authors conclude their report as follows: to sum up the results obtained with the employment of pepto-mangan (Gude) in the treatment of anemias, we may say conscientiously, that it is the best remedy we know of for this purpose, and that we do not hesitate to commend it to the medical profession at large, and especially to our confrères in Cuba, as an iron preparation that possesses all the advantages that can be demanded of such a remedy and none of the disadvantages that are characteristic of other iron preparations. We would especially emphasise also that pepto-mangan (Gude) is very pleasant to the taste, and is most easily taken by patients of all ages and with the most delicate digestions.

Cysts of the Kidney.

KENNETH A. J. MACKENZIE, of Portland, Oregon, (*Med. Sentinel*, August, 1902,) says: simple or serous cysts are met with under various conditions. They are found in connection with the cirrhotic kidney, and are due to occlusion of the uriniferous tubules by encroachment of the neoplastic tissue. They are usually small, occasionally multiple, their growth is slow, and their fluid contains none of the urinary constituents. I have observed three cases in which there was nothing to suggest interstitial nephritis (three cases reported, complete cure in all three by nephrotomy, incision of the cyst, and drainage).

I have observed simple serous cysts in the young subjects in the post-mortem room. Serous cysts are more common in women than in men, in the proportion of twenty to three. Inasmuch as interstitial nephritis is more common in men than in women, the statement that the disease referred to is the constant concomitant of cystic kidney would seem to be fallacious. The diagnosis is difficult; they have been mistaken for omental, mesenteric, ovarian, pancreatic, hepatic and splenic cysts, also for hydatids, new growths and perinephritic effusions.

POLYCYSTIC KIDNEY. CONGLOMERATE KIDNEY CYST.

The kidney is large in typical cases, and the whole organ appears converted into cysts. Cysts are found in the cortex, and medulla, and very frequently the cortex is entirely eclipsed by cysts. The cysts vary in size from a pea to an orange. The color of the cysts is often variegated, due to blood pigment alterations.

The specimen exhibited looked like a large bunch of fruit. Contents of the cysts are very often limpid, sometimes viscid and colloid, and sometimes they are solid and caseous. Both kidneys are generally involved, and sometimes the cysts involve the liver, spleen and other organs. Osler has recently called attention to the influence of heredity. The cyst walls are very thin, easily ruptured and are lined by thin tesselated epithelium; they seldom intercommunicate. The surviving tissue of the kidney shows atrophy and sclerosis.

Wilks and Moxon regard the condition as an advanced state of cystic disorder, found in granular kidney, and call attention to the identity of the circulatory disturbance in both diseases.

THEORIES EXPLAINING THE CONDITION.

I.

CONGENITAL INFLUENCES.

(*a*) Persistent germinal rudiments.

(*b*) Failure of union of the excretory canals with the convoluted tubules.

(*c*) Congenital feebleness of the walls of the tubules, resulting in dilatation, under the stress of the normal intrarenal pressure.

II.

Peritubular sclerosis, constriction of the tubules and backward dilatation of the Malpighian capsules, the disease being an essential part of cirrhosis of the kidney.

III.

Fetal inflammation of the papillæ, causing atresia and occlusion of the papillæ, and preventing communication between the uriniferous tubules and the calices of the kidney.

IV.

There is first local destruction of the tissue, followed by cystic or colloid degeneration.

V.

The cysts are neoplastic beginning in the epithelium of the tubules. Some authorities regard the disease as belonging to the adenomata.

The problem of etiology is to be studied in the light of the following questions:

(1) Is the development of the polycystic kidney common in the state known as granular kidney? (2) are the commonly accepted causes of granular kidney identical with those of polycystic kidney? (3) is congenital cystic kidney of the fetus or the new-born identical with the polycystic kidney of the adult? (4) is the age at which the disease develops the same as that of interstitial nephritis? (5) does the law of heredity apply in like manner to both diseases? (6) does the fact that cystic degeneration of the other organs, like the spleen and liver in the same individual at the same time, not suggest that it is a disease *per se*, independent of, and not associated with interstitial nephritis? (7) are the cardiovascular disturbances constant in polycystic kidney, and if so are they the same as those constantly associated with granular kidney? (8) is polycystic kid-

ney associated with alcoholism, the gouty state or excesses in eating? (9) is there a tendency in polycystic kidney to anemia or dropsical effusions as in Bright's disease? (10) are the urinary modifications the same in the two diseases?

Migrainin in Headaches.

Migrainin is phenozon-caffein citrate and occurs as a white crystalline powder, readily soluble in water and alcohol. The solutions are slightly acid. It is used in migrain, headaches of influenza, in neuralgia, sciatica, following alcoholic excesses, nicotin poisoning, and the like.

In the treatment of migrain with phenacetin or antipyrin, the attack is delayed, while with migranin it is usually permanently stayed. In those attacks of typical hemicrania accompanied by gastric or gastrointestinal disturbances, anorexia, nausea, vomiting, meteorism, feeble and slow pulse, photophobia and general depression, amounting at times almost to unconsciousness, migrainin will invariably meet the indications without effect upon the pulse or heart. One author describes the action of migrainin as follows:

A few minutes after taking the remedy, a sensation of relief begins to make itself felt, as if the worst of the attack was passed. This assurance of relief becomes more distinct for the next quarter of an hour, frequently accompanied by a pleasing sensation of warmth, with a slight perspiration. In twenty or thirty minutes all pain has practically disappeared and complete recovery is effected within an hour, the general sensation of comfort lasting all day, and insuring a good night's rest.

For adults the dose of migrainin in all forms of headaches is 17 grains, preferably dissolved in a small glass of water, without additional quantity of water following. It should never be given in wine, beer, tea or other liquids. In general the patient should rest quietly for an hour and a half after the powder is taken. If necessary a second dose may be taken, but only in two hours. The remedy should be taken early, or directly after the first signs of headache appear and if possible on a empty stomach. Nothing should be eaten, nor drink of any kind for at least two hours after the remedy has been given. More than three powders in twenty-four hours are useless.—*Therapeutic Progress.*

BUFFALO MEDICAL JOURNAL.

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EDITOR:

WILLIAM WARREN POTTER, M. D.

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The Charter of the Medical Society of the State of New York.

IN THE December issue of the JOURNAL we gave editorially our first impressions of the plan, proposed by the committees of conference, "to charter the Medical Society of the State of New York." We now offer some supplementary impressions upon that unique proposition the result of a further study of the proposed bill.

Careful reading of that peculiar document reveals additional evidence that it was written in a spirit distinctly antagonistic to the interests of the state society; or, if not, its verbiage is unfortunate.

For example, we are told, in the preamble and in section six, that the state society was "organised" and "founded" in 1806, and that the state association was "incorporated in 1884, and chartered in 1900." That there may be no uncertainty as to the fact that the state society up to this time has had, in the mind of the author of this bill, neither incorporation nor charter, is made as plain as words can make it in the next sentence of the preamble giving the purpose of the law in its title—namely, "an act, to charter the Medical Society of the State of New York," and section one adds the impressive words "There shall be established by the physicians named in section six of this act an organisation styled 'The Medical Society of the State of New York.'" We are unwilling to believe that such misrepresentation is studied and intentional, but rather that it is accidental and thoughtless.

It is to be noted, however, that the society sought to be founded by the proposed bill, is most undemocratic in composi-

tion and effect. Section five provides for "the superintendence and management of 'the Medical Society of the State of New York' by 'a body known and styled the council and Fellows,'" and gives to this body, which possibly may be very small in numerical aggregate, the minimum number not being named, not only the broad general powers of "superintendence and management," but also the specific "power to make and prescribe by-laws that shall govern its officers, council, fellows, and members; to establish the conditions of admission, dismission and expulsion of members; to determine the amount of the annual dues and also to impose assessments from time to time on its members; to collect such dues and assessments by suit or otherwise, and to receive, hold, invest, or otherwise dispose of all moneys or other property belonging to the said Medical Society of the State of New York, and in general to make such by-laws, rules and regulations for the proper government of the society and of its branches and subordinate county societies, etc., etc."

We regard this plan as undemocratic, and unAmerican if not intolerably autocratic. Moreover, it is, in our view, undignified to "superintend" and "manage" a great society of scientific physicians, as if it were a steel plant or other commercial enterprise.

Again, it is to be remarked that the proposed bill, if enacted would abolish the state and county societies, and possibly create an interval of considerable and indefinite duration, in which the homeopathic and eclectic state and county societies would be the only organised medical societies in the state, and would leave to the former of these the title of seniority by nearly half a century —namely, from 1857 to 1903.

Still again, the proposed bill is unfair and unjust to the state society in that it makes members of the entire association, which is in the nature of a mass meeting organisation, whereas the state society is a delegate body.

The proposed bill is liable to further objection in that it contemplates a business corporation, law practice, and life insurance —all worthy and possibly gainful pursuits, but not the high single aim and level of the preamble of 1806.

But it is not likely that the representatives of the state society have assented to the proposed bill, because their instructions did not contemplate such radical action. An attentive study of the president's inaugural address, in which the conference committee was suggested, and of the report of the committee to whom the address was referred, in which the action taken by

the society was advised and through which it was finally authorised, fails to find the slightest intimation that the state society contemplated repudiation of its birthright. The title of this division of the inaugural address, "The relations of the Medical Society of the State of New York to the National Profession," clearly points out the object of the committee advised, and the following sentences just as clearly indicate why it seemed to the president that the work should be undertaken at this time: "because of the encouragement received by the reorganisation upon a broad platform of the American Medical Association."

This reorganisation had brought the organic law of the national body into harmony with that of the state society, hence affiliation was possible and, of course, desirable.

The object and method of the committee were plainly laid down in the resolution appointing it which goes on to say:

"In the event of failure" of the preliminary negotiations "the committee appointed by the Medical Society of the State of New York shall have full power . . . to represent this society before the American Medical Association and the secretary of this society shall . . . provide the individual members with credentials to represent this society in the American Medical Association."

It would seem from the above that the real, the important, work of our committee is yet to be undertaken.

Finally, we think this proposed bill objectionable to the state society as a basis of medical organisation in that it is wanting in maturity, breadth, catholicity and simplicity; moreover, it may not be appealed to as non-sectarian as may the law of 1806.

We all know and acknowledge with pleasure that the state association membership includes men of eminent personality, of broad and noble aspirations for our profession and its higher ideals, but we also remember that the history of that association shows that it has had human guidance and that its purposes have not always been free from sectarian tendencies. That these tendencies should find expression in its organic law is but natural, but that its organic law, scarcely three years old, should be thought superior to that of the state society, representing the wisdom and experience of a century, is incredible.

We may be pardoned we trust for pointing out in the published proceedings of the state association a virtual ultimatum offered and passed at its last meeting, that will be found on another page, which indicates to our mind that the times are

not propitious for successful negotiations in this direction; and we are glad that an alternative anticipating such a situation was prepared in the instructions to our committee.

This alternative, the sending of a committee asking membership in the American Medical Association upon the credentials of the Medical Society of the State of New York, seems to us to be a comparatively simple and easy way of testing the temper of the national body which, as our memory serves, is or was the real party in controversy with our state society. The American Association itself having swept away the barriers of difference there should be no reason why it would not deal directly with our ambassadors. Why not, if we have anything to say, try the American method of diplomacy and make a plain statement of our case at headquarters? At least, this plan would appear to the average observer as worthy of trial.

Dr. Adolf Lorenz.

THE most important medical event of the late autumn and early winter season of 1902, has been and at the present writing continues to be the visit of Professor Dr. Lorenz, the distinguished Vienna orthopedic surgeon, to the principal cities of the United States, in which he has held and is holding clinics for the demonstration of his special work.

When Professor Lorenz arrived at Chicago, in October, for the purpose of operating upon the little daughter of Mr. J. Ogden Armour, the newspapers were filled with sensational accounts of the man and his work. This served in a measure to develop prejudice in the minds of a large portion of the medical profession. It was not long, however, before it was discovered that the distinguished visitor was not responsible for the gratuitous advertising which the "yellows" gave him. His whole mien and bearing was observed to be that of the modest gentleman, which he is. He has not even turned aside to notice these sensational accounts of his tour and work which, in and of itself, is the best evidence of his modesty and sterling worth.

When the Illinois State Board of Health asked Dr. Lorenz to comply with the law and take out a state license, he at once submitted to the necessary examination and courteously thanked the board for calling his attention to the matter. This is in marked contrast to the attitude of some of our American physicians toward the state examination.

Dr Adolf Lorenz

From the New York Medical Journal.

After completing his work at Chicago, which included many gratuitous operations upon children whose people were unable to pay for them, Professor Lorenz crossed the continent for a brief sojourn in Southern California. Coming eastward again he reached Washington early in December, where he was presented to the President of the United States and received other attentions from the Austrian Minister. Since that time he has been kept busy operating in Baltimore, Philadelphia and New York, and at the present writing is in Boston where he finishes his demonstrations in this country and will sail for home from New York on the last day of the year 1902.

In person Prof. Lorenz stands erect, he is about five feet and eleven inches in height, is 49 years of age, he wears long, brown whiskers tinged with gray, and brown hair brushed straight backward from his forehead. His manner is calm and thoughtful and his kindly eye and gentle demeanor win not only his little patients, but his attendants and audience as well. It is an interesting picture to see him walk into the clinic room accompanied by his assistant, Dr. Friedreich Müller, and those of the hospital staff who are assigned to work with him, and with all the modesty of a woman begin the toilsome operation that only a stalwart man is equal to deal with. But after the greetings of applause have subsided he at once begins the reading of a typewritten lecture, evidently timid of his ability to master our language extemporaneously, though he speaks it accurately and with only a minimum of foreign accent. His lecture is devoted to a description of his method of operating for congenital luxation of the hip-joint. He continues its delivery until the anesthetised patient is rolled in, when he lays it aside and begins the operation. After its completion, which may occupy from eight to fifteen minutes, he turns the patient over to Dr. Müller to apply the plaster dressing while Professor Lorenz, himself, resumes the reading of his manuscript lecture.

Dr. Müller is an expert in his work. He begins it at once, carries it on rapidly, speaking never a word during the application of the bandage, and is himself an attractive figure in the group around the patient. He is smooth shaven, wears a short brown moustache which, together with his close-trimmed brown hair, his erect carriage and his delightful manner, makes him an interesting figure in the clinic arena.

The first operation including the lecture and application of the dressing is usually completed within half an hour, after

which the next patient is rolled in and the process is repeated this time, however, without the reading from the manuscript, though the operator frequently makes remarks explaining the application of the method to the particular case in hand; and this goes on for the third or fourth time, or until both the allotted time and the operators are exhausted.

During his visit to New York, Professor Lorenz held clinics at the Hospital for Ruptured and Crippled, at the Polyclinic, at the Post-Graduate, at Cornell University, at Bellevue, at the New York Orthopedic Dispensary and Hospital, at the King's County Hospital and at the State Hospital for Ruptured and Crippled Children at Tarrytown. These together with his many social engagements served to make a busy week for both himself and Dr. Müller.

We have not attempted a description of the operation itself, in its scientific aspects, because that has been done already by many writers; our aim rather having been to present a pen picture of the man himself at his work. The portrait we publish is an excellent likeness, and will be appreciated by our readers for its artistic merit, we feel sure. It was kindly loaned to us by our esteemed contemporary, *The New York Medical Journal.*

Professor Lorenz has followed wherever the profession has led him, never for a moment pushing himself forward or shrinking from responsibility, but accepting each duty as it presented itself and discharging it with all the zeal and ability of a man who thoroughly understands his work and has an assured faith in its value to mankind. His visit to this country, and especially to New York, will ever be a pleasant memory to those who met him or witnessed his demonstrations of operative skill.

Reciprocity in Licensure Once More.

THE subject of interstate reciprocity in medical license has been discussed in these columns on many occasions, and we feel that it is almost unnecessary to return to the subject until we can offer something new to our readers relating to this vexed question. The journals have been printing considerable material of late that has dealt with many features of the proposition, much of which has missed its essential points, but we find an editorial article in the *Boston Medical and Surgical Journal* for December 18, 1902, which exhibits such a grasp of the subject as well as such a breadth of knowledge of all its bear-

ings, that we feel justified in giving it in full, and we ask all interested to read it carefully, because it is a succinct statement of the real facts in the case, set forth in a plain, straightforward manner. It is as follows:

RECIPROCITY, OR INTERSTATE LICENSURE OF PHYSICIANS.

The impression is more or less general among medical men that a person registered as a physician in one state should, on removing to another, be recognised by the authorities therein as a qualified practitioner and licensed to practise, without being required to take another state examination, or even to pay another state registration fee. For several years this matter has received considerable attention both in the medical press and in the discussions of medical men in many of the states.

A few years ago a national organisation was effected by the examining and licensing boards of the country, in an endeavor to bring about as nearly as possible a uniformity not only of methods of procedure but of qualifications required for licensure. It was thought by the promoters of this organisation that under a uniformity of requirements by the various boards, a system of reciprocity might ultimately result, whereby a physician licensed by any recognised state board might secure a license to practise within the jurisdiction of any other board, without incurring the expense and trouble of a new examination. But in this respect, thus far, the work of this organisation has proved a disappointment. In the path of reciprocity, so to speak, many obstacles appear which perhaps at first sight do not present themselves as hindrances at all.

The examining boards in the different states are differently organised. They act under different laws, making different requirements. In a number of states, Michigan, for instance, and Colorado, Kentucky, Nebraska, Vermont and several others, a diploma from a recognised medical school is the only qualification required for licensure. In Massachusetts, New York, Pennsylvania and various other states, the laws require that every applicant shall be examined as to his qualifications to practise. And even in states requiring an examination of all, it is easy to see that standards of qualification may differ widely. Each state is naturally jealous of its own work and standards, especially its educational standards. The several states, so far as their internal affairs are concerned, are quite independent of each other. Each makes its own laws and cares for its own people in its own peculiar way, and exercises no more authority over or in the affairs of other states of the Union than does France in the affairs of Great Britain. Hence arise difficulties nearly, if not quite, insuperable in the way of medical reciprocity.

The contention sometimes heard as to the desirability of a national law governing practice is utterly futile from the fact

that the national government cannot legislate at all on such matters. The constitution, the organic law of the union of the states, does not permit such interference in state affairs.

In a few states, notably New Jersey and Maine, the examining boards have provided for a limited interchange of registration certificates issued by certain states. But the "red tape" guarding this process of registration, taken with the fact that the fee of registration through interchange of certificates is double that required for registration by the examination process, is quite enough to render such a system of registration undesirable, if not altogether impracticable.

It is clearly within the authority of examining boards, as usually constituted, in testing the qualifications of applicants for registration, to give weight to the credentials a practitioner may bring from another state board or from his former peers in practice. This is the kind of reciprocity one would naturally expect and which unquestionably is regarded by all state boards. Under existing circumstances this is about as far as reciprocity is likely to go in the near future.

THE following resolutions were adopted by the council and Fellows of The New York State Medical Association at the annual meeting, held at the New York Academy of Medicine, October 20, 1902:

Resolved, That the report of the committee appointed to confer with a committee representing the Medical Society of the State of New York for the purpose of devising a plan for the union of the New York State Medical Association and the Medical Society of the State of New York, is hereby approved.

Resolved, That the plan presented at the joint session of the two committees by the committee representing this association, whereby, "The New York State Medical Association and the Medical Society of the State of New York be reconstituted by an act of the legislature into a state medical body, to be known as the Medical Society of the State of New York, of which all members in good standing in both bodies shall be charter members, and the reconstituted state medical body shall be the representative in this state of the American Medical Association by virtue of its acceptance of the constitution and by-laws of the American Medical Association," is hereby accepted by The New York State Medical Association as an expression of our sincere desire for a union of the medical profession in this state.

Resolved, That the committee is hereby continued for the purpose of coöperating with any committee from the Medical Society of the State of New York to secure a charter from the legislature at its next session in 1903, which charter shall reconstitute the two state organisations into one state body, as set forth in the preceding resolution; but if the Medical Society of

the State of New York shall fail to approve of such plan of union by a charter, to be secured at the approaching session of the legislature in 1903, then this committee shall be considered as discharged and the proposition of this association withdrawn.

Resolved: In case this committee should find occasion to apply to the legislature at its next session for the purpose of securing the said charter it shall coöperate with the standing committee on legislation of this association.

The State Department of Health now furnishes diphtheria antitoxin, prepared and tested in its antitoxin laboratory, under the following regulations: It is to be supplied for the treatment or immunisation of the following persons—namely, inmates of state institutions; inmates of other charitable institutions located in New York state; persons residing in this state unable to purchase the remedy.

Antitoxin prepared and distributed by the department is not to be sold under any circumstances, and a violation of the above prescribed rules will subject the violator to the penalty provided by section 397 of the penal code.

Physicians obtaining antitoxin for use as above noted, must agree to report the results from its use on the proper blank. Those entitled to receive the remedy under the above schedule should apply as follows: state institutions, to the state department of health, Albany; all others to the health officer of the city, town or village where they are located or reside.

At a meeting of the common council of Buffalo, held December 15, 1902, a resolution was offered by Ald. Mullenhoff and passed without a dissenting vote, calling upon the Corporation Counsel to draft such an amendment to the statutory law as will prohibit treatments which are not bona fide physical treatments, and making such offences criminal acts, and that the senators and assemblymen representing Erie County be directed to use all honorable means and do all in their power to have the legislature pass the proposed amendment to the laws of this state. The resolution was preceded by several statements concerning Antonius, who has advertised himself throughout Buffalo and vicinity as the "Boy Wonder and Healer."

The foregoing action of the city legislature was prompted by the commendable course of *The Buffalo Review* in holding up to public view the fakir above referred to. It is to be hoped that the splendid efforts of the *Review* will serve to stimulate

the district attorney's office to take action that will rid Buffalo of an unmitigated nuisance.

At a meeting of the regents of the University of the State of New York, held at Albany, December 5, 1902 the Right Rev. William Croswell Doane, Protestant Episcopal Bishop of Albany, was elected chancellor to succeed the late Anson Judd Upson, and Regent Whitelaw Reid was elected vice-chancellor to succeed Bishop Doane.

A number of charter amendments of schools working under regents' charters were approved and permanent library charters were granted to the Binghamton public library, the Oneida public library, the Adams free library, and the Massena free library. Provisional library charters were granted the Collins and East Rockaway free libraries.

Dr. L. A. Martin, of Binghamton, was appointed a state medical examiner to succeed Dr. Willard N. Bell, of Ogdensburg and Dr. E. D. Ackerman, of Oneida, was appointed a state veterinary examiner, to succeed Dr. F. L. Kilbourne, of Kelloggsville.

PERSONAL.

Dr. Richard H. Satterlee, of Buffalo, has removed from 187 Delaware Avenue to The Touraine, corner of Delaware Avenue and Johnson Park. Practice limited to diseases of the eye. Hours: 9-1, 3-4.

Lt.Colonel G. Sterling Ryerson, M. D., of Toronto, has been promoted to the grade of colonel in recognition of his services as Red Cross Commissioner in South Africa.

Dr. G. Frank Lydston, of Chicago, has recently returned from an extended tour of Australia, New Zealand, Samoa and the Hawaiian Islands.

Dr. Frank L. Carpenter, U. of B.'91, of Vacaville, Cal., recently visited Buffalo. He was accompanied by Mrs. Carpenter and they were the guests of Dr. Robert Hebenstreit, of 430 Broadway.

Dr. Charles H. Andrews, U. of B., '88, who entered the military service as acting assistant surgeon during the war with

Spain, and was subsequently transferred to the Philippines, has returned to Buffalo. His present address is 1015 Elmwood Avenue.

Dr. Ira C. Brown, surgeon U. S. Volunteers, who has been on duty in the Philippines for the past three years, has returned to Buffalo, where he expects to remain during the winter. His address is 788 Seventh Street.

Dr. H. H. Glosser, formerly of Paoli, Pa., has located in Buffalo. His office and residence are at 1007 Elmwood Avenue. Dr. Glosser will make examinations of blood, urine and sputum. Telephone, North, 1112.

Dr. Adolf Lorenz, professor of orthopedic surgery in the University of Vienna, has received the honorary degree of doctor of laws from the Northwestern University. The ceremony was witnessed by the trustees, faculty and several hundred invited guests.

OBITUARY.

Dr. Jacob M. Kraus, of Buffalo, U. of B., '89, died at his home in this city December 19, 1902, aged 36 years. Dr. Kraus had been ill for several months, and went to Denver in the autumn with the hope of recuperation, but this proved a disappointing hope and he returned a few weeks ago. He had been steadily failing until death came as stated. His disease proved to be intestinal tuberculosis. He was one of the brightest of the younger physicians of Buffalo, and was always found upon the side of professional integrity and business honor. He was a native of Clarence, N. Y., and a graduate of the Academy at that place. He is survived by a widow and two children, aged nine and five years respectively, the elder being a boy and the younger a girl.

The Roswell Park Medical Club, at a special meeting, adopted the following memorial:

For the first time in the history of the club we are called upon to mourn the death of one of our members.

Dr. Jacob M. Kraus died at his home in this city December 19, 1902, at the age of 36 years. In his death the club loses a most esteemed member and well-beloved associate.

Dr. Kraus was always modest and unassuming, courteous in demeanor and genial in companionship—in all respects a model gentleman. His principles were as fixed as the planets—he was what the poet calls "the noblest work of God, an honest man." His skill as a physician was unquestioned; his professional councils always weighed with his associates.

As son, brother, husband and father, he did his whole duty and did it cheerfully. He will be missed by all who knew him —further than this eulogy cannot go.

The entire experiences of Dr. Kraus were marked by uncommon difficulties and hardships, but buoyed by a heroic will and strengthened by a conscientious purpose, he pushed steadily on until he was able to overcome them all. He had just begun to reap where he had so persistently and generously sown, when he himself was gathered in by "the reaper whose name is death."

The club associates of Dr. Kraus unite in expressing their deep grief at his "untimely taking off" and their truest sympathy with the family so suddenly and sorely bereaved.

The medical staff of the Dispensary of the German Hospital, at a special meeting held December 19, 1902, adopted the following memorial and resolutions:

The news of the untimely death of our friend and colleague, Dr. Jacob M. Kraus, fills us with unspeakable sorrow. Dr. Kraus has been a member of the staff of this dispensary since its inception, and until prevented by sickness from continuing his service has shirked no duty, but discharged every obligation faithfully and well.

His untiring labors, his studious habits and his practical accomplishments had already borne the fruit of a large practice, and his manly virtue and professional integrity have endeared him to all who knew him.

Dr. Kraus was one of nature's noblemen, a man of fidelity, integrity and honesty. What greater praise can be paid to any mortal?

Resolved, That we express to the family of Dr. Kraus our sincerest sorrow.

Resolved, That this memorial and these resolutions be spread on the minutes, a copy sent to the family and copies to the medical press.

Resolved, That we attend the funeral in a body.

CHARLES J. MENGIS, M. D.,
ABRAM L. WEIL, M. D.,
CHARLES WEIL, M. D. } *Committee.*

DR. LEVI J. HIXON, of La Salle, N. Y., died suddenly at his home December 5, 1902, from the effects, it was thought, of an overdose of medicine which he had taken inadvertently. He

was a native of Canada and resided at La Salle about 18 years. He is survived by a widow and a young daughter.

Dr. Louis E. Krombien, of Buffalo, (U. of B., '60), died at his home in this city December 7, 1902, aged 76 years. His death was sudden and was believed to be due to sequelæ of an attack of grip, from which he had recently suffered, and that his age and feebleness proved unequal to the strain.

Dr. Krombien had been in practice here from his graduation and had many attached friends. Of late years his work had been somewhat limited by his health, which was not robust, but he did not retire from practice. He was an amiable, modest man and mingled but little with the world, giving his entire attention to his own affairs.

Dr. M. N. Benjamin, of Dunkirk, one of the oldest and best known physicians in that city, died at his home in Central Avenue, November 27, 1902, after a protracted illness, aged 59 years.

Dr. Benjamin was a graduate of Vermont University and served through the civil war as a surgeon in the Union Army, being one of the youngest medical officers in the service. He is survived by a widow and one daughter, Mrs. Frank D. Bliss, of Buffalo.

SOCIETY MEETINGS.

The Erie County Medical Association held its quarterly meeting in Buffalo at the University Club, Monday evening, December 8, 1902, under the presidency of Dr. J. W. Grosvenor, of this city, The scientific program was as follows: Presentation of cases and specimens; Paper: Hypertrophy of the Prostate, Marcel Hartwig. Leaders of discussion, W. C. Phelps, E. J. Meyer. Discussion of the question: Is a cycloplegic necessary for refractive work? Affirmative, A. G. Bennett; negative, E. E. Blaauw. General discussion. Dr. Jacob S. Otto is the secretary.

The Fourteenth International Congress of Medicine will be held in Madrid, Spain, from April 23 to 30, 1903, under the patronage of their Majesties, the King of Spain and the Queen-Mother.

The President of the Congress is Professor Julian Calleja y Sanchez, the General Secretary is Dr. Angel Fernandez-Caro, and the General Treasurer is Prof. Jose Gomez Ocana.

The preliminary statements of regulations and program have been issued, and announce that members of the congress will be physicians, pharmacists, dentists, veterinary surgeons, and other persons working at branches of medical science, both Spaniards and foreigners, who have entered their names and paid their subscriptions. Other persons, who possess scientific or professional titles, and who wish to take part in the work of the congress may share in it under the above conditions.

The subscription is thirty pesetas, and this sum must be paid before the opening of the congress to the general secretary, Faculty of Medicine, Madrid. A card of membership will be sent to the subscriber.

Until March 20, 1903, subscriptions may be paid to the secretary of the national committee of the subscriber, but after that date subscriptions must be paid directly to the general secretary at Madrid.

Blank forms of application addressed to the Bureau des Logements in Madrid, forms of application for those who desire to read papers at the Congress, as well as other literature bearing on the subject may be obtained upon request from the undersigned

Members will receive a summary of the proceedings of the congress and a full report of the work of the particular section which they join.

The official languages of the congress will be Spanish, French, English, German and Italian.

Papers must be sent to the general secretary on or before January 1, 1903, to be certain of a place in the order of business.

Papers presented later will be considered after the discussion of those regularly announced.

Communications should be accompanied by a short abstract, which will be printed and distributed among the members of the congress.

J. H. Huddleston, Secretary American Committee, 126 West 85th St., New York City.

The American Medical Association will hold its fifty-fourth annual meeting at New Orleans, May 5, 6, 7 and 8, 1903. The officers are as follows: president, Frank Billings, Illinois; first

vice-president, J. A. Witherspoon, Tennessee; second vice-president G. F. Comstock, New York; third vice-president, C. R. Holmes, Ohio; fourth vice-president, James H. Dunn, Minnesota; secretary-editor, George H. Simmons, Illinois; treasurer, Henry P. Newman, Illinois; chairman committee of arrangements, Isadore Dyer, 124 Baronne Street, New Orleans; board of trustees, Miles F. Porter, Ft. Wayne, 1903; E. Fletcher Ingals, Chicago, 1903; W. L. Rodman, Philadelphia, 1903; W. W. Grant, Denver, 1904; John F. Fulton, St. Paul, 1904; T. J. Happel, chairman, Trenton, Tenn., 1904; E. E. Montgomery, secretary, Philadelphia, 1905; H. L. E. Johnson, Washington, D.C., 1905; A. L. Wright, Carroll, Iowa, 1905; judicial council, term expires 1903: F. H. Wiggin, secretary, New York; G. B. Gillespie, Tennessee; D. C. Peyton, Indiana. Term expires 1904: T. C. Martin, Ohio; J. B. Roberts, Pennsylvania; Christopher Tompkins, Virginia. Term expires 1905: Philip Marvel, chairman, New Jersey; George Cook, New Hampshire; N. S. Davis, Jr., Illinois; oration on medicine, J. M. Anders, Philadelphia; oration on surgery, A. F. Jonas, Omaha; oration on state medicine, Wm. H. Welch, Baltimore.

Officers of Sections.—Practice of medicine—chairman, W. S. Thayer, Baltimore; secretary, James B. McElroy, Stoval, Miss.; executive committee, George Dock, Ann Arbor; J. M. Anders, Philadelphia; Frank A. Jones, Memphis.

Obstetrics and diseases of women—chairman, A. Palmer Dudley, New York; secretary, C. L. Bonifield, Cincinnati; executive committee, W. E. B. Davis, Birmingham; Henry P. Newman, Chicago; J. H. Carstens, Detroit.

Surgery and anatomy—chairman, James E. Moore, Minneapolis; secretary, John C. Munro, Boston; executive committee, H. O. Walker, Detroit; A. J. Ochsner, Chicago; DeForest Willard, Philadelphia.

Hygiene and sanitary science—chairman, H. M. Bracken, Minneapolis; secretary, G. T. Swarts, Providence; executive committee, Arthur R. Reynolds, Chicago.

Ophthalmology — chairman, John E. Weeks, New York; secretary, Frank Todd, Minneapolis; executive committee, H. V. Würdemann, Milwaukee; J. A. Lippincott, Pittsburg; Frank Allport, Chicago.

Diseases of children—chairman, John C. Cook, Chicago; secretary, Thos. S. Southworth, New York City; executive committee, Edwin Rosenthal, Philadelphia; Samuel W. Kelley, Cleveland; H. M. McClanahan, Omaha.

Stomatology—chairman, M. L. Rhein, New York; secretary, Eugene S. Talbot, Chicago; executive committee, M. H. Fletcher, Cincinnati; R. R. Andrews, Cambridge; A. H. Peck, Chicago.

Nervous and mental diseases—chairman, F. W. Langdon, Cincinnati; secretary, F. Savary Pearce, Philadelphia; executive committee, Hugh T. Patrick, Chicago; H. A. Tomlinson, St. Peter, Minn.; Richard Dewey, Wauwatosa, Wis.

Cutaneous medicine and surgery—chairman, John A. Fordyce, New York; secretary, R. R. Campbell, Chicago; executive committee, L. Duncan Bulkley, New York; W. L. Baum, Chicago; Henry W. Stelwagon, Philadelphia.

Laryngology and otology—chairman, Geo. L. Richards, Fall River; secretary, J. F. Barnhill, Indianapolis; executive committee, C. R. Holmes, Cincinnati; J. N. Mackenzie, Baltimore; G. Hudson Makuen, Philadelphia.

Materia medica, pharmacy and therapeutics—chairman, Solomon Solis-Cohen, Philadelphia; secretary, C. S. N. Hallberg, Chicago; executive committee, Leon L. Solomon, Louisville; N. S. Davis, Jr., Chicago; George F. Butler, Alma, Mich.

Pathology and physiology—chairman, Victor C. Vaughan, Ann Arbor; secretary, Joseph McFarland, Philadelphia; executive committee, W. S. Hall, Chicago; L. Hektoen, Chicago; Frank B. Wynn, Indianapolis.

New Orleans is a most interesting and hospitable city and the association is fortunate in its selection as a place of meeting. In May it may be said to be at its best in its garb of spring, with its magnolias in blossom perfuming the air with sweetest odors, and all nature is in her best attire to welcome visitors.

The chairman of the committee of arrangements, Dr. Isadore Dyer, is well known to the profession as a capable executive officer, and has put the machinery in motion for a splendid business and social reception of the association.

The American Röntgen Ray Society held its third annual meeting at Chicago, December 10 and 11, 1902, at which Dr. John C. Pitkin, of Buffalo, read a paper entitled, Equal potential surfaces in the x-ray field.

The Medical Society of the County of Erie will hold its 82d annual meeting in the parlors of the Y. M. C. A. Building, corner Mohawk and Pearl Streets, beginning at 10 o'clock a.m.,

Tuesday, January 13, 1903, under the presidency of Dr. Walden M. Ward, of North Collins. The secretary, Dr. F. C. Gram, is preparing the program, which will include some interesting features.

The Buffalo Academy of Medicine held meetings during the month of December, 1902, as follows:

Section on Surgery.—Tuesday evening, December 2. Program: To what extent may the female genitals be saved from mutilation? J. Henry Dowd; The use of silver leaf in the treatment of skin ulcers, David E. Wheeler; Are antiseptics of any value in hand disinfection? E. R. McGuire. Discussion: Drs. Park, Parmenter, E. A. Smith and others.

Section on Medicine.—Tuesday evening, December 9. Program: Pulsations of the thoracic wall, with report of a case of pulsating hemothorax. Report of a case of eventration of the diaphragm, Joseph Sailer, Philadelphia; Nephritis in infants, Charles Sumner Jones.

Section on Pathology.—Tuesday evening, December 16. Program: The prevalence and geographic distribution of hookworm disease (uncinariasis) in the United States, Charles Wardell Stiles, zoologist to the United States Public Health and Marine Hospital Service, Washington, D.C.

Section on Obstetrics and Gynecology.—Tuesday evening, December 23. Program: Indications for inducing abortion, Marcel Hartwig.

The Medical Society of the State of New York will hold its 97th annual meeting at Albany, Tuesday, Wednesday and Thursday, January 27, 28 and 29, 1903, under the presidency of Dr. Henry Reed Hopkins, of Buffalo. The committee of arrangements, under the chairmanship of Dr. Ernest Wende, is preparing an elaborate program which will soon be published.

COLLEGE AND HOSPITAL NOTES.

Dr. Lillian Craig Randall, of Riverside Hospital, is establishing an accident hospital in the Fitch Institute Building, Michigan and Swan Streets, to be known as the Riverside Accident Hospital. For many years there were two accident hospi-

tals in that section of the city, but the Fitch Hospital was closed and the Emergency Hospital removed to Pine and Eagle Streets, leaving the old neighborhood without an institution of the kind.

A relief station, known as first relief station of the Riverside Accident Hospital, has been opened in a cottage at No. 796 Tonawanda Street. Four rooms have been fitted up for the first care of the injured, the Riverside Hospital ambulance serving in emergency calls. The relief station will be used only for giving the first dressing and if the patient needs further hospital care, he will be removed to the hospital in Lafayette Avenue. A trained nurse will be in attendance throughout the day and Dr. J. H. Potter and Dr. John C. Thompson, who are in the vicinity, will give medical attendance. Owing to the numerous accidents in the factories and other establishments in Black Rock, the relief station is greatly needed.

At New Haven, Conn., the tuberculosis hospital of which there has been talk of building for some years is to be built within a short time, recent gifts of land on Woodbridge Heights having assured the success of the undertaking. The hospital will be run mainly on the fresh air theory.

An Infant incubator outfit has been installed in the Children's Hospital, 219 Bryant Street, Buffalo, N. Y. The board of managers desire to acquaint physicians and all interested in this city and the surrounding country with this fact, and that they are in readiness to care for any infant requiring such treatment. They also wish to state that the hospital is now prepared to receive contagious cases occurring in children under fourteen years of age.

The governors of the New York Skin and Cancer Hospital announce that Dr. L. Duncan Bulkley will give a fifth series of clinical lectures on diseases of the skin in the out-patient hall of the hospital on Wednesday afternoons, commencing January 7, 1903, at 4.15 o'clock. The course will be free to the medical profession.

Batavia is about to build a smallpox hospital, plans having been submitted by Architect Hyde and accepted by the town and village boards of health. Work will be commenced soon on the building, which will be erected on River Street in that village.

BOOK REVIEWS.

A Textbook of the Surgical Principles and Surgical Diseases of the Face, Mouth and Jaws. For Dental Students. By Horace Grant, A M., M. D, Professor of Surgery and of Clinical Surgery, Hospital College of Medicine; Professor of Oral Surgery, Louisville College of Dentistry, Louisville. Octavo volume of 231 pages, with 68 illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $2.50 net.]

The great need of improvement in the methods of teaching dental students, a plea for which has been made many times, receives additional emphasis in this excellent textbook. The practice of dentistry is becoming a scientific occupation and the teaching necessary to prepare a student for its arduous work must be thorough-going and complete. The contribution of this work to the literature of scientific dentistry will serve to advance the standard in the direction named.

Professor Grant begins his book very properly with a chapter on bacteriology, which it would be well for every student of dentistry to study with care. There is too much laxity in the matter of sterilisation in dental offices, and this chapter without doubt will stimulate greater care in this direction. Another chapter for dentists to observe with attention and to heed is the one devoted to the consideration of anesthesia. The accidents from carelessness in the administration of anesthetics in dental offices are too numerous, and the timely presentation of the subject here is to be commended. Another chapter of importance is the one on syphilis. This topic should be studied with great care by dentists for here, again, is an opportunity for improvement in preventive measures. These three chapters are worth the price of the book and the information they contain ought to be widely disseminated among dentists.

The chapter on hemorrhage is of great interest, not only because it deals with an important subject but because, further, it handles it in an able manner. Besides the topics alluded to there are others of importance and great interest that are well presented; but these mentioned being of fundamental significance have been pointed out, to afford the intending purchaser an idea of the scope of the work. There are twenty-nine chapters in all which discuss inflammation, suppuration, ulceration, gangrene, autoinfection, pyemia, wounds, tumors, tuberculous and other diseases of bones; surgical lesions of the mouth and face, cleft palate, harelip, lesions of the lips and tongue, diseases of the salivary glands, of the maxillary and other sinuses, neuralgia, dislocations and fractures of the jaw and bones of the face, together with other topics, or subtopics of interest and value.

The illustrations, while not numerous, serve to delineate the text here and there with clearness, though there is room for improvement in this direction both in quality and quantity. A

well-arranged index serves to round out a most excellent treatise upon which the distinguished author deserves the congratulations of both dental and medical professions.

PRACTICAL DIAGNOSIS. The Use of Symptoms and Physical Signs in the Diagnosis of Disease By HOBART AMORY HARE, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; Author of a Textbook of Practical Therapeutics. Fifth edition, revised and enlarged. Octavo, pp. 710. Illustrated. Philadelphia and New York: Lea Brothers & Co. 1902. [Price, cloth, $5.00 net.]

This book is manifestly the work of an experienced teacher. The method of teaching clinical medicine is the logical interpretation of the history of the patient and connecting it with the signs and symptoms discovered. The eliciting of the signs and the search for symptoms is methodically shown.

In private practice, as in hospital service, there is only one way of diagnosis, and that is by grouping of symptoms and signs until the clinical picture is complete, and that clinical picture we label a disease. The book is divided into two parts. The first treats of the manifestation of disease in organs. The first chapter takes up successively the appearance of the face and extremities, and includes deformities, spasms, tremors and deformities.

The remaining chapters are a close study of the tongue, skin, thorax and its viscera, the abdomen and its viscera, the blood-vessels and the eye.

The chapter on the examination of the blood and the interpretation of the various changes noted, also the chapters on the examination of urine and feces, are very valuable and are clearly written.

The second part is a study of the manifestation of disease by symptoms and presents in succession the significance of fever, headaches, vertigo, coma, convulsions, hiccough, vomiting, pain, tendon reflexes, and the changes in speech.

The text is in the author's well-known clear and forceful style. The deductions from symptoms are logical. The understanding of the various areas of anesthesia of nerve distribution of regional disease is made easy by illustrations admirably adapted for the purpose. The book is one of the most helpful works on diagnosis published. J. W. P.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF GYNECOLOGY. By E. C. DUDLEY, A. M., M. D., Professor of Gynecology in the Northwestern University Medical School, Chicago. New (3d) edition enlarged and thoroughly revised. Octavo of 756 pages, with 474 engravings, of which 60 are in colors and 22 colored plates. Philadelphia and New York: Lea Brothers & Co. 1902. [Cloth, $5.00 net; leather, $6.00 net; half morocco, $6.50 net]

The favor Dudley's treatise met with when first issued is indicated by the exhaustion of two editions in but little more than three years. Considering that many works on gynecology have

been issued within a comparatively recent date, this is strong testimony as to the value of Dudley's book.

In the journal for December, 1898, p. 314, we pointed out some of the essential features of this treatise—its stronger points—and gave reasons for its superior worth. The general scope and plan of the volume, too, were considered in much detail. Now, after three and a half years of trial and having stood the test, there is small need of a repetition of the method adopted in our first review. It is more particularly our duty at this time to indicate salients, changes, and improvements.

In the first place it will be remembered that Dudley's aim is to present a practical treatise divided into sections or chapters from the viewpoint of pathological and etiological sequence, not on the basis of the diverse diseases of special organs without, however, sacrificing the unity of the pathological processes as they may affect consecutively the different pelvic organs. Besides the plan of grouping subjects on pathological lines, Dudley also seeks to exclude whatever is not based upon practical experience; in other words, he sets forth that which is of greatest aid to the student and physician. He has dealt with the whole field, as will thus become apparent, from the standpoint of originality, rather than tradition, and the work thus becomes of the greatest possible value.

The book has been thoroughly revised in a most painstaking manner, obsolete material being excluded and new matter added, many chapters being in this way arranged, rewritten, or condensed, as the case may be. This has served to add about 100 pages without making the volume cumbersome. Tables and parallel columns are extensively used, which serves to minimise space while enlarging the usefulness of the book for class work and reference.

The illustrations deserve commendation as being clear, original, and helpful to a better appreciation of the text. Dudley in this respect demonstrates, again, his thoroughly practical method of teaching, being a master of his subject, and possessing a peculiarly gifted talent for demonstrating it to others.

Diseases of the Rectum and Anus. Designed for Students and Practitioners of Medicine. By Samuel Goodwin Gant, M. D., L.L. D., Professor of Rectal and Anal Surgery at the New York Post-Graduate Medical School and Hospital; Attending Surgeon for Rectal and Anal Diseases to the New York Post-Graduate Hospital, St. Mark's Hospital, Hebrew Sheltering Guardian Orphan Asylum, and New York Infant Asylum. Second edition, rewritten and enlarged, with 37 full-page plates, 20 of which are in colors, and 212 smaller engravings and half-tones. Pages xxiv.-687. Royal octavo. Philadelphia: F. A. Davis Company. 1902. [Extra cloth, $5.00 net; sheep or half-Russia, $6.00 net, delivered.]

According to the title page, of which the foregoing is a transcript, we are told this is a second edition of a work previously written by this author, but a comparison of the two editions discovers a surprising difference between them; indeed,

it is so great as to almost justify the conclusion that they are altogether different books, with a mere coincidence of authorship. The first is a somewhat crude example of provincialism in book writing, while the second is a splendid specimen of metropolitan development.

It is true that the six years that have passed between the issuance of the two editions have witnessed many improvements in this department of medical science, but it is also quite true that the author, having removed from the West to New York, has expanded his methods and contracted his statements, so that now his book takes place among the foremost of its kind. It is an exposition of the present state of knowledge concerning diseases of the region with which it deals, and is a credit to the author and to American medicine.

In this edition, besides the rewriting of the old book, the author has added new chapters and new engravings, until the original plan of the work is lost in the new and splendid book that has been evolved. It now takes a high rank among the textbooks of the period, and is a safe guide—to undergraduates as well as practitioner—to the study of diseases of the lower intestinal tract and region, as well as to their cure by operative surgery or other means.

The illustrations deserve to be mentioned as a special feature of the book. They are of the best, and represent the very foremost point of advance in the illustrator's art. The author deserves the congratulations of his professional colleagues for the improvements he has made in this edition, and for the general excellence of his treatise.

A TEXTBOOK OF ANATOMY. By American authors. Edited by FREDERIC HENRY GERRISH, M D., Professor of Anatomy in the Medical School of Maine, Bowdoin College. Second Edition, thoroughly revised and enlarged. In one imperial octavo volume of 943 pages, with 1003 engravings in black and colors. Philadelphia and New York: Lea Brothers and Co., Publishers. 1902. [Cloth, $6 50 net; leather, $7.50 net; flexible waterproof binding, for use on the dissecting table, $7.00 net.]

A good anatomical textbook is a necessary part of every physican's library and of every student's outfit. Moreover, the most practical book is made up into a single volume which deals with the essentials of the human body, leaving out exceptional conditions and unimportant departures from the normal state. Gerrish's anatomy is just such a work.

Let us hear the editor speak on the subject, which he does in the following words:

> Between the extremes, represented on the one hand by pocket manuals, with their flavorless condensation, and on the other hand, by encyclopedias of universal inclusiveness, there is room for a work of convenient size, sufficient to contain in systematic array those portions of anatomical knowledge which are necessary to the intelligent study of physiology, surgery, and internal medicine. * * * The authors have unceasingly endeavored to facilitate the work of both student and teacher. Both are tested in every examination, and particularly in those conducted by state licensing boards. Accordingly, from the vast accumulations of

anatomical science, those portions have been selected which are likely to be of actual service to the student in his subsequent study, and to the practitioner in his clinical work.

This extract from the preface expresses in terse English the scope and purpose of the work, and is in fact a compact review in and of itself. In the preparation of the work the editor has associated with himself some of the ablest anatomists in America. The work of all the contributors is so blended that the effect is homogeneous and quite like that of a single author. Were it not for the announcement of the names at the head of the chapters in the table of contents it would be impossible to differentiate their work. While, therefore, the book is encyclopedic in fact, it is monogenetic in effect.

The illustrations are marvels of richness in detail and color, being over 1,000 in number, executed by the most skilful artists. They lend attractiveness to the text and enhance the instructive character of the work in a manifold degree. It is an anatomical exposition that is not excelled in practical value, and appeals to student, teacher and practitioner alike, in its wealth of material, accuracy and artistic merit of illustration, and in the beauty of mechanical make-up of the volume.

THE INTERNATIONAL TEXTBOOK OF SURGERY. In two volumes. By American and British Authors. Edited by J. COLLINS WARREN, M. D., LL. D., F. R. C. S., (Hon.), Professor of Surgery, Harvard Medical School; and A. Pearce Gould, M. S., F. R. C. S., of London, England. Second edition, thoroughly revised and enlarged. Vol. I. General and Operative Surgery. Royal octavo of 965 pages, with 461 illustrations and 9 full-paged colored lithographic plates. Vol. II., Special or Regional Surgery. Royal octavo of 1,122 pages, with 499 illustrations, and 8 full-paged colored lithographic plates. Philadelphia and London: W. B Saunders & Co. 1902. [Cloth, $5.00 net; sheep or half-morocco, $6.00 a volume net.]

It is not surprising that so good a treatise as this should pass through its second edition in but little more than two years. When first issued it was recognised as entitled to a foremost place as a textbook, and it bids fair to retain that position for some time to come.

The entire work has been subjected to careful revision though so completely had the original work been done that few changes have been required.

Military and naval surgery have received a new impetus from the Spanish-American and South African wars, and this fact has been taken advantage of by the authors in the revision and rewriting of the chapters on these subjects.

The chapters on diseases of the lymphatic system, on the surgery of the spleen, and on the surgery of the kidney, have undergone revision, so that the recent surgical improvements relating to these organs may be brought forward, recorded, and given place in the literature of the present day.

The general scope and plan of the work remains the same. In the first volume is given the essentials of general and opera-

tive surgery, and in the second regional surgery is detailed. The engravings have been increased in number, making one of the most copiously illustrated textbooks extant. The American author is one of the most accomplished and best known surgeons of the period, and his English colleague is scarcely less distinguished. It is a fortunate editorial combination, because it serves to present the best surgery of the hour on both sides of the Atlantic to English-speaking people in every quarter of the globe.

LEA'S SERIES OF MEDICAL EPITOMES. Diseases of the Skin A Manual for Students and Practitioners. By ALFRED SCHALEK, M. D., instructor of Dermatology, Genitourinary, and Venereal Diseases, Rush Medical College, Chicago. Series edited by Victor C. Pedersen, A. M., M D, House Surgeon at the New York Hospital, New York. 12mo, pp. 225. Illustrated with 34 engravings. Lea Brothers & Co., Philadelphia and New York. 1902. [Price, $1.00.]

In this little volume Dr. Schalek has tersely and plainly stated the fundamental principles of dermatology as at present understood. The descriptions of the various diseases follow in the usual order and are brief but clear. Numerous questions are propounded which are calculated to impress upon the reader the salient points relating to each particular affection.

How much demand there may be for such a book it is not easy to conjecture, although the epitomés by Stelwagon and Shamberg have gone beyond their editions,—one or two others having disappeared with the first edition. It might be claimed that such a work is timely since medical epitomés are now in order, and dermatology should, of course, find its place among them, but it is not altogether certain that such a claim can readily be substantiated in the face of the present superfluity in medical literature.

A small work like this may, indeed, to a certain degree, aid the medical student in remembering points relating to a particular disease, or help a busy practitioner in diagnosticating affections and selecting a quick treatment for them. Still, the authors hope it will be distinctly understood that epitomés are never to be substituted for larger textbooks,—a result easier to deprecate than to prevent.

The pictures are copied from Hyde's and Jackson's larger works. While most of them were acceptable when they first appeared they have not been improved upon by their transfer to this smaller work. G.W.W.

THE TREATMENT OF FRACTURES. By CHARLES L. SCUDDER, M.D., Assistant in Clinical and Operative Surgery, Harvard Medical School. Third edition, revised and enlarged. Octavo, 480 pages, with 645 original illustrations. Philadelphia and London: W. B. Saunders & Co., 1902. [Polished buckram, $4.50 net; half morocco, $5.50 net.]

The popularity of this monograph, great as it became at once upon the appearance of the first edition, has gone on increasing

with such amazing rapidity, that it is seen in its third edition in but little more than two years. Nor is it strange, for it is easily the most attractive treatise that has been published on the treatment of fractures and, moreover, it may be called, without exaggeration or reflection on other good works, the most instructive. This is partly because of its illustrations, and partly because of the direct and uncomplicated methods in presenting each fracture in detail.

The illustrations are something phenomenal. In a work of 485 pages there are 645 pictures, in half-tone and wood, most of which are from life-models, showing dressings in various stages of application, and in numerous instances the fracture itself is depicted before reduction, thus presenting its deformities and peculiarities; so that, altogether it is the best illustrated medical book, whether judged from quantity or quality, that has been published within our knowledge.

The author has made some changes and additions in this edition, among which are facts in gunshot fractures developed by the recent wars, some of the plates being taken from Mr. Makins's "Surgical Experience in South Africa." There is every reason to believe that the distinguished young author will be called upon at an early date to prepare another edition of this most valuable treatise, for the probabilities are very great that this one will be exhausted within a comparatively short time.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by HENRY W. CATTELL, A. M., M. D., Philadelphia, with the Collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D , London, with Regular Correspondents in Montreal, London, Paris, Leipsic, and Vienna. J. B. Lippincott Company, Philadelphia and London. [Cloth, $2.00.] Volume III. [Twelfth Series, 1902.]

This volume discusses topics in the fields of therapeutics, medicine, surgery, obstetrics and gynecology, and diseases of the eye, ear and throat. Two special articles are added, one on the function of the digestive glands based on the researches of Paolof and his pupils, by Peter Borrissof; and the other being a critical study of the theory of inflammation, by Hans Schmaus.

Among the other articles of note in the book may be mentioned one on the treatment of morphinism, by Crothers; another on the insect pests of human beings, by Walsh; and yet another on the effects of firearms at short range, by Brinton. Moreover, the book is filled with lectures of interest and contains

many illustrations of merit. It is an excellent number in the series, and the clinics deserve the continued support of the profession.

A Textbook of Physical Diagnosis. For Students and Practitioners of Medicine. By Egbert Le Fevre, M. D., Professor of Clinical Medicine, and Associate Professor of Therapeutics, University and Bellevue Medical College, Attending Physician to Bellevue and St. Luke's Hospitals, New York, 12mo, 440 pages, with 74 engravings and 12 plates. Lea Brothers & Co., Philadelphia and New York. 1902. [Cloth, $2.25 net.]

Among the additions that have been made recently to an already extensive literature relating to physical diagnosis this book will take front rank. It is prepared by a teacher of experience and a clinician of accomplishment. In this book Le Fevre gives adequate instruction upon all the details of physical diagnosis—inspection, palpation, percussion, and auscultation—together with all other directions for obtaining information in diseases of the respiratory and circulatory systems. The abdomen, too, receives equally detailed attention and the same methods as applied to the thorax are employed and explained, with the variations necessary to be made in the diagnosis of diseases of organs of the lower cavity. A number of engravings and *x*-ray plates are presented to elucidate the text, and an excellent index closes a valuable book that is a distinct addition to the literature useful to the student and junior practitioner of medicine.

Spectacles and Eyeglasses. Their Forms, Mounting, and Proper Adjustment. By R. J. Phillips, M D., Ophthalmologist Presbyterian Orphanage, Philadelphia. Third edition revised, with 52 illustrations Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $1.00]

This useful little book of 109 pages should be in the hands of every ophthalmologist, whether he furnishes glasses or writes prescriptions for them. The third edition is a credit to the author being quite complete and giving useful details without unnecessary padding to add to the size of the volume. The text remains very much the same with an addition wherever necessary to report the advances made in lens' manufacture and one or two new tables for reference. R.H.S.

The Johns Hopkins Hospital Reports. Volume X., Nos. 3, 4 and 5. Baltimore: The Johns Hopkins Press. 1902.

The investigation comprising this report are of a pathological nature and worthy of careful study and consideration.

Dr. Dorothy M. Reed, of the hospital, contributes an interesting article on the pathological changes in Hodgkin's disease with especial reference to its relation to tuberculosis. The author feels that although the pathological agent is as yet undiscovered, it has no direct relation with tuberculosis, and that a

microscopic examination is sufficient for the diagnosis. Dr. Thomas Futcher, M.B., contributes an article on diabetes insipidus with a report of five cases; Drs. W. T. Howard, Jr., and R. G. Perkins, of Cleveland, O., contribute a very interesting investigation on the origin and occurrence of cases with eosinophile granulations in normal and pathological tissues. Dr. Frank W. Lynch presents a paper on placental transmission, with report of a case during typhoid fever. W. C. K.

BLAKISTON'S QUIZ COMPENDS. Compend of Special Pathology. By ALFRED EDWARD THAYER, M. D., Assistant Instructor in Cross Pathology, Cornell Medical College; Pathologist to the City Hospital, New York. Duodecimo, pp. 322. Illustrated. Philadelphia. P. Blakiston's Son & Co. 1902. [Price, 80 cents net.]

The importance of a knowledge of pathology increases with the advancement of medical science along general lines. Any method or book, or picture that tends to improve or increase this knowledge is to be welcomed.

Experience would seem to indicate that these little volumes are of value in this direction. They are prepared by teachers and are purchased by students upon their advice, hence must be accepted as part of the necessary equipment of the undergraduate. This book is one of the very best of the compends and is prepared by a teacher who not only understands his subject but imparts information concerning it with surprising clearness. For these reasons it is to be commended to the beginner.

BOOKS RECEIVED.

A Manual of Dissection and Practical Anatomy. Founded on Gray and Gerrish. By William T. Eckley, M. D, Professor of Anatomy in the Medical and Dental Departments of the University of Illinois; the Chicago School of Anatomy and Physiology; the Chicago Clinical School, and West Side Training Schools for Nurses And Corinne B. Eckley, Demonstrator of Anatomy in the Medical and Dental Departments of the Unive sity of Illinois. Octavo, pp. 414. Illustrated with 220 engravings, 116 of which are colored. Lea Brothers & Co. 1903. [Price, $3.50 net.]

Medical Microscopy. Designed for Students in Laboratory Work and for Practitioners. By T. E. Oertel. M. D., Professor of Histology, Pathology, Bacteriology, and Clinical Microscopy, Medical Department University of Georgia. 12mo, pp. 374. With 131 illustrations, some of which are colored. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $2.00 net.]

How to Succeed in the Practice of Medicine. By Joseph McDowell Mathews, M D., LL. D. President Kentucky State Board of Health; Professor of Surgery, Hospital Medical College, Louisville; Author of "Mathews on Diseases of the Rectum." Octavo, pp. 234. Illustrated. Louisville: John P. Morton & Company, 1902. [Price, $2.00.]

The Mattison Method in Morphinism. A Modern and Humane Treatment of the Morphin Disease. By J. B. Mattison, M D., Medical Director, Brooklyn Home for Narcotic Inebriates. 12mo, pp. 40. New York: E. B. Treat & Co. 1902. [Price, $1.00.]

A Reference Handbook of the Medical Science. Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By various

writers. A new edition, completely revised and rewritten. Edited by Albert H. Buck, M. D , New York City. Volume V. Illustrated by chromolithographs and 576 half-tone and wood engravings. Nine volumes, imperial 8vo. New York: William Wood & Co. 1902. [Price, muslin, $6.00 per volume; leather, $7 00 per volume; half morocco, $8.00 per volume.]

Regional Minor Surgery. By George Gray Van Schaick, M. D., Attending Surgeon French Hospital, New York. 226 pages. Profusely illustrated New York: International Journal of Surgery Co. 1902 [Price, $1.50.]

Textbook of Medical Jurisprudence and Toxicology. By John J. Reese, M. D., late Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania. Sixth edition. Revised by Henry Leffmann, A. M., M. D., Professor of Chemistry and Toxicology in the Woman's Medical College of Pennsylvania. 12mo, pp. 676. Philadelphia: P. Blakiston's Son & Co. 1902. (Price, $3.00 net.]

Transactions of the State Medical Association of Texas. Thirty-fourth Annual Session, held at Dallas, Texas, May 6-9, 1902. H. A. West, M. D., Secretary.

Transactions of the American Otological Society. Thirty-fifth Annual Session, held at New London, Conn., July 16, 1902. Frederick L. Jack, M. D., Secretary. Volume VIII., Part 1. Published by the Society.

LITERARY NOTES.

MESSRS. P. BLAKISTON'S SON & CO. are publishing "Biographical Clinics; the origin of the ill-health of DeQuincey, Carlyle, Darwin, Huxley and Browning," by Dr. George M .Gould. The author has gathered from the biographies, writings and letters of the five named men every reference to their ill-health. Each endured, as is well known, a life of suffering which made almost every day a torment and by which their work and worth as an asset of the nation and civilisation was conditioned and often rendered morbid. The cause of their affliction was an utter mystery to their physicians. Dr. Gould's conclusion from logic and from a careful summary of the clinical symptoms, is that each of the writers suffered from eyestrain, and that scientific correction of their ametropia would have transformed their lives of mystery into lives of happiness. A history of the discovery of astigmatism and eyestrain, with a discussion of its indications and responsibilities, completes the work. It is interestingly written, and will undoubtedly meet with a ready sale among medical men and those interested in the works and lives of these great writers.

THE *New York Medical Journal* in its issue of December 20, 1902, publishes a report of the clinic of Professor Lorenz, held at the hospital for the ruptured and crippled, his first demonstration in New York, illustrated with an accurate half-tone engraving.

ITEMS.

THE *Annals of Surgery* for December completes the eighteenth year of its publication. In the fulness of its table of contents, and in the important character of its articles, it quite equals, if it does not excel, any number that has preceded it; and this is saying much, since from the first number this magazine has been the medium through which the best surgical writers and teachers on both sides of the Atlantic have published their work. The table of contents includes articles on genitourinary surgery, anatomy of the pelvis and abdomen, rupture of the kidney, and several papers on abdominal surgery besides many short abstracts. It should be examined to be appreciated.

THE Physicians' Daily Memorandum for 1903, published by the M. J. Breitenbach Company, of New York, makes its appearance with promptitude. It is one of the most useful of desk reminders, being issued in the same style as in former years, and can be had by addressing the publishers, 53 Warren Street.

THE Antikamnia Calendar for 1903 is another artistic water color by Helen Hyde and is entitled, "His First Temple Offering," (the Joss stick). On the reverse is a Calendar with some useful antikamnia notes. Duplicates can be had by sending 10 cents to the Antikamnia Company, St. Louis, Mo.

THE Daily Reminder Calendar (1903) of Scott and Bowne is a handy equipment for the desk, one slip for each day in the year, each one having printed upon it a note concerning Scott's emulsion. The publishers will send it upon application. Address, 411 Pearl Street, New York.

THE New York Pharmacal Association, Yonkers, N.Y., present to the profession an artistic folder calendar, containing portraits of eminent physicians, of ancient and modern times. The calendar embraces the period between October 1, 1902, to October 1, 1903.

THE Denver Chemical Manufacturing Company is sending their "Antiphlogistine" Christmas folder to every physician in America and England. It is a calendar and a reminder of the uses of antiphlogistine as well; and besides it is an artistic little souvenir of the season.

BUFFALO MEDICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

Progress, Liberty, Unity.

Anniversary Address of the President at the Ninety-seventh Annual Meeting of the Medical Society of the State of New York.[1]

BY HENRY REED HOPKINS, M. D., Buffalo, N. Y.

THE submission of a free people to the executive authority of government is no more than a compliance with laws which they themselves have enacted.

The first requisite of liberty, as we and our forefathers have known it, is the willingness to abide by the law.

Fear nothing but to do wrong, dread nothing but to be recreant to public duty.

A sympathetic study of the history of our society, a history which began nearly a hundred years ago; an intimate personal knowledge of its affairs for almost half of that time; a review of the general progress of medical discovery during the same period; a careful study of its medical legislation and litigations; some acquaintance with the coincident developments in political, economical, and sociological science, and meditation upon the contemporaneous movements of certain great medical bodies toward organisation or reorganisation on broad, catholic, legal principles, have convinced me that the medical mind is prepared as it never before has been for a judicious consideration of the important truths included in our title.

The facts I ask you to consider fall naturally into three groups,—the political, the practical, and the scientific.

POLITICAL.

I know of no duty, next to the worship and obedience which we owe to our Father who art in Heaven, that is more impera-

1. At Albany, N. Y., Wednesday, January 28, 1903.

tive in its requisitions and more delightful in the performance, than that which the municipal law requires from its various professors. To be shielded and led by the divine nature and immortal reason of law is one of the most sacred rights of man.

It seems to have been assumed by the state from the beginning, and the assumption has been consistently sustained by the courts, that as the state recognises religion, but no particular sect, so it recognises medicine, but no special school of practice. The state does not claim to be an expert in the fine distinctions of either religion or medicine, but freely concedes to the masters in both that priceless gift, the most precious in the power of any government to bestow, liberty—namely, liberty in worship and in science. Our constitution provides that the worship of Almighty God shall be free in thought, in heart, and in form; that in medicine belief and practice shall be free; its investigation unhampered, its conclusion uncontrolled by human authority.

Only by grasping the full significance of these two facts: (1) that the medical profession is a unit; (2) that it is free and its members independent, and holding them in equipoise without slighting or minimising either, may we prepare our minds for the right reception of the truths of this question, in sound discretion and for the furtherance of justice. So, and only so, can we prove that we have made good use of our liberty; so, and only so, can we demonstrate our fitness for American citizenship.

Our state constitution reads: The enacting clause of all bills shall be: The people of the State of New York, represented in Senate and Assembly, do enact as follows. We will do well to remember that the sanction and authority of law have lost nothing in force or in continuing effect by the transfer from the former style of We, by the Grace of God, King, Emperor, Most High Sovereign, Ruler and Potentate, to We, the people of the State of New York, grateful to Almighty God for our freedom, in order to secure its blessings do establish this constitution.

In the olden time obedience to law and reverence for it sprang from the conviction that the King's authority, the source of law, could do no wrong.

Shall not we who have enjoyed for more than a century the blessings of liberty repeat with equal fervor, with increased loyalty, with added appreciation, the words of Webster, Justice, sir, is the great interest of man on earth. It is the ligament which holds civilised beings and civilised nations together. Wherever her temple stands, and so long as it is duly honored,

there is a foundation for social security, general happiness and the improvement and progress of our race; and the still more expressive apostrophe of Everett: Universal law—in action alternately executive, legislative, and judicial; in form successively constitution, statute, and decree—mingles into one harmonious, protecting, strengthening, vitalising sublime system; brightest image on earth of that ineffable Sovereign Energy, which, with mingled power, wisdom and love upholds and governs the universe. Again, it is only necessary to recall that the sovereign will of We, the people of the Empire State, has enacted that the medical profession shall have unity and liberty, and as we value liberty—that priceless blessing—let us recall that liberty is our birthright under the constitution, which we may magnify, honor and defend by obedience; and that effectiveness in progress, security in liberty, demand unity.

And further, we must not forget that responsibility is always measured by opportunity, that the strength and perpetuity of constitutional government are established and promoted in proportion as the whole people show sympathetic obedience unto the statutes and unto the judgments. We of the medical profession know more than the average citizen; knowledge increases responsibility. How may we better teach the ignorant artisan —half savage and part anarchist — self-control, moderation, respect and obedience to law, than by our own example of obedience, and of obedience even against inclination.

Moreover, I am sure that now, as in times past, misunderstanding plays a large part in the opposition of our profession to the efforts of the state in the direction of medical unity. We have feared that the state desired and sought to produce by legal enactment uniformity of medical practice. That is an impossibility. Men are individuals and individuals always have and always will differ. A clear perception that medical unity is not uniformity of practice, and that a proclamation of uniformity would be a denial of freedom and therefore impossible, should prevent further misunderstanding in this direction and enable us to appreciate rightly, legal medical unity, its origin, nature, and potentiality, to the end that we may conduct ourselves in harmony with its principles.

Unity in medicine is absolutely essential to efficiency and progress in that most important branch of sanitary science, state medicine. Consider for a moment some of the characteristics of

state medicine. It is the supreme function of our profession. Success here means honor and confidence both at home and abroad and wins the sympathetic ear of the most liberal progressive and competent men. Nor should we forget that its work is never ended. Its problems increase in difficulty and complexity with the age of the government, the density of population, and the wealth of the people.

Sanitary codes,—the most intelligent and the most humane of legal enactments,—are the joint product of the will of the people and the wisdom of their physicians. Such codes and the manner of their execution are the most accurate exponents of the real civilisation of their times; their conception, enactment, and execution demand good understanding and sympathy between the parties.

Sanitary organisation should keep pace with the progress of preventive medicine, and so far as the conditions of the people permit, it should be the most complete, the most intelligent and the ablest of all in this age of organisations.

What could be more appropriate than that the Empire State by a united medical profession, in cordial sympathy with the law and with the source of law, should show the way to a sanitary organisation commensurate in dignity and completeness of detail with her exalted position and noble purposes, and evolve sanitary codes so perfect that the humblest child in the state might receive the fullest benefit of the wisest, most modern, and most progressive, preventive medicine.

I should be false to this occasion and its high responsibility if I failed to remind you that the sanitary organisations of our state, as well as those of her sister commonwealths, are distinctly inferior to those of contemporaneous Europe in quality of membership, in official rank, in public estimation and consequently in effectiveness.

The wife of the humblest moujik is attended in childbirth by a midwife, whose license runs in the name of We, Nicolos Alexandrovitch, Emperor and Autocrat of all the Russias, Tsar of Moscow, Lord of Pskow, Grand Duke of Smolensk. The state board of health of Germany is under the presidency of the Chancellor of the German Empire. Is it strange that the great cities of that empire have less than one-third of the typhoid fever that annually ravages the cities of this state?

The literature of state medicine contains no history more instructive or more inspiring than the account of the sanitary

measures by which Hebrew slaves escaping from the brickyards of Egypt were guarded during the whole of that marvelous march in the wilderness of Zin,—march not of a week, the time that seems to be the limit of strength and resources for our regiments,—but of forty years, the time required for the wisest sanitation to transform a mob of slaves into a nation of warriors, statesmen, architects, historians, poets, capable of establishing the civilisation of Palestine, of building the temple of Solomon, and of producing a monument more enduring than marble or brass, the literature of Isaiah and of David. But the head of their board of health was Moses, the man who talked with God face to face.

Our minds should be stimulated, our convictions strengthened, our energies aroused by the contemplation of the fact, that the glorious accomplishments of state medicine in the past have been achieved without aid from the science of hygiene; our fathers had only faith and hope,—we have also demonstrated knowledge. The introduction of pure water to the cities of Europe was not an experiment; the sanitary campaign of Wood in Cuba was not an experiment; state medicine of today is not an experiment, and investments under its direction are not speculations.

HEAR THE CONSTITUTION.

We, the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this constitution for the United States of America—to promote the general welfare.

The efficient sanitary organisation of our country, where the humblest citizen is a member of the royal family, will not be suitably inaugurated until there shall be in the cabinet at Washington a secretary of health. The medical profession of the United States would require but a few national campaigns in the name and interest of State Medicine to accomplish this most salutary, most desirable of sanitary achievements.

PRACTICAL OBSERVATIONS.

The absolute justice of the state enlightened by the perfect reason of the state—that is law.

Reason is the life of law; nay, the common law itself is nothing else but reason.

Let us consider the possibility of having in our state a medical profession, united and organised for the purpose of State Medicine, and for such other purposes as experience and wisdom may deem advisable.

What are the essentials of such an organisation? They are three: (1) a common belief in principles so clear, so cogent, so logical, so practical that it will engage our minds, strengthen our convictions, stimulate our ambitions and warm our hearts until conviction may ripen into action; (2) an occasion calling for the efforts of such an organisation; (3) men to engage in the work who are urged on by a conviction of its necessity and eager for the labor it demands.

The art and science of State Medicine, the present needs of our people, our enormous death-rate from diseases known to be communicable and therefore preventable, the necessity of a higher standard for state license, furnish the occasion for the required opinions, knowledge, and convictions.

We are here. We are officials of the government. In the mind of the state we are one. We are working at the problems of state medicine, and in spite of our lack of unity we have made some progress toward their solution. We still believe that in union there is strength. The proposed unity, without requiring us to surrender any principle, prerogative or opinion, furnishes an opportunity of showing to the world a conspicuous instance of obedience to the law, of deference to the will of the sovereign people at the cost of some small sacrifice of custom, prejudice or pride.

It is significant that medical unity is tacitly recognised by ourselves as present in a greater degree than some would admit—from filing a certificate as to the cause of death all the way up to the highest function performed by a medical man, service upon a board of state examiners for state license.

We may well give a moment's consideration to the frame of mind on our part which is essential to a profitable consideration of this subject. Two things seem to be needful: (1) a thorough understanding of the temper of our legislators expressed in the medical laws of the state, together with an intimate knowledge of the law itself, and of the philosophy which underlies it and will be sure to influence any and all of its future developments and amendments. There is not time to treat the subject exhaustively and I can only advert to a single principle which seems to me the more important. The theory of our

medical law has been, is, and will be, that to the people the medical profession is a unit. There may be, as there has been, varieties of belief, but there must be a common responsibility. The law never has undertaken and never will undertake to discriminate and choose between different medical beliefs and opinions regarding the mode of action of a given drug, or the method of treating a given disease. Upon such questions the law is silent, justly discerning that they are for the decision of medical men, singly, or in assemblies where varying minds and varying experience may hear and determine, and where if wrong conclusions are adopted, further observation, further experiment and fuller light, may make it the plain duty of today to reverse, as so many times has been done, the findings of yesterday.

Again, it seems to be essential that we should show a sympathetic loyal obedience to the law of the state both in its letter and its spirit. These words sympathetic, loyal obedience, are not lightly selected, but seriously chosen, for the obedience in question must be from the heart; it must be a sympathetic obedience, not the obedience of the officer who hates the regulations he is forced to observe, but that of the loyal Jesuit who obeys because he loves.

Finally, to this knowledge of the law, and to this condition in our hearts of sympathetic obedience thereto, must be added as a requisite to that state of medical organisation, whereby we alone may meet and discharge our full responsibility as the guardians of the public health, an abiding conviction of the need of medical unity. Remember that in stewards it is required that a man be found faithful.

Only to those of us fortunately possessed of these qualifications of knowledge, mind and heart, is this argument addressed; only to such does it seem possible that a wise conclusion may follow a judicious consideration. To others it will be like attempting to present the arguments of christianity to those who disbelieve in the existence and immortality of the soul.

Again, it may be stated as a general principle, that medical unity will never be made easier, brought nearer or made more efficient, by dwelling upon the limitations, or the imperfections in conduct or practice of our brethren. As long as we remain men such limitations and imperfections will abound. We ourselves may possibly at times show this evidence of a common humanity, and our brother's infirmity is but one more reason

why he should have the advantage of our strengthening and elevating society.

Wisdom and experience teach that it is expedient for us to make much of our brother's good qualities, and that as to his faults forbear to judge, for we are sinners all.

We have seen that a successful organisation must have the continuous stimulus of work which calls for the doing, work which must be done, work which may be done only by the organisation in question.

Does such exist here and now? Surely it does. First of all, the best efforts of the organised medical profession of this state are needed to extend to its millions of people the protection, the preventive protection, of the demonstrated knowledge of hygiene.

It may not be our proud privilege to be pioneers and discoverers of new truths in any of the many departments of hygiene, but at least it is our duty to keep abreast of the column of progress and discovery, to be ready to receive the advances, to take advantage of the discoveries, to transmit to our people the priceless sickness preventing and life-saving hygienic truths which are being coined from day to day by the army of scientific pioneers,—remembering that we are just entering upon a new century, and that the highest round of successful accomplishment in one age is frequently only the point of departure for that which is to come.

The limits of your courteous forbearance and consideration for the proprieties of the occasion, do not permit an extended presentation of the manifold questions of hygiene that now press for solution. An entire address might well be devoted to the consideration of a single topic. It is enough to say that each is important, and that the whole constitutes a body of work, of transcendent moment, work in a realm in which the coin is not silver or gold, but that infinitely more precious material —human life.

Let me invite your attention to a group of communicable diseases which differ in destructive power and in the manner of communication, but are alike in their diffusion and alike in the manner in which their prevention is neglected,—gonorrhea, syphilis and consumption. From this one group, mentioned in a single breath, we suffer an annual mortality and stagger under an everlasting load of affliction and maiming almost incredible.

To attack this single group of diseases with success, demands knowledge, resources of legislation and command of capital in sovereign amounts. Here is an opportunity for every physician and philanthropist in the state to engage in work which can be accomplished only by and through the most thorough of organisations.

Intimately related to the foregoing in more than one way is the interesting and important sanitary problem of a better housing of the poor in our larger cities.

This subject is already a nightmare to those who study the causes operating to form the congested areas in our growing cities, and who realise what a menace to health and morals, to right living and to good citizenship such congested areas always are. Here, as in the previous problem, resources of the most varied character, ability of the highest order, zeal and perseverance second to none are required. Three thoughts should move us to prompt action: (1) the belief on the part of all students that prevention is easier and more economical than cure; (2) the conviction of the best informed that in many instances the growth of our cities has but begun; (3) the general consensus of feeling that the present century is to be noted for its success in the attack of hitherto resistant sociological problems, and that of such problems the better housing of the poor in cities is of preëminent importance.

For years those having authority have directed attention to the impure state of the waters in many of our streams, and the consequent prevalence of typhoid fever not alone, or chiefly, in large cities, but in many of the smaller towns. Attention has also been called over and over again to the important relation between the health of the community as well as to the productivity of the soil, and the protection from floods of a due proportion of forest lands. We know that in nature's great storehouse, where provision is made for the preservation of health and restoration from disease, no items equal in value pure water, pure air and sunshine. To keep our streams and other sources of water supply free from foulness and infection, to preserve our forests from useless destruction, to redeem denuded regions by reforestration, to drain our marshes where breeds the disease bearing anophiles, to transform the foul disease-spreading dampness of the sub-soil in our city streets into the benign, protective, ornamental foliage of the Carolina poplar, the elm or maple,—this is a work worthy of kings, a work that only kings

may do, a work that the sovereign people of the Empire State may only accomplish when inspired and led by the united profession of medicine.

Without doubt, the most important event in our medical history of the last half century was the institution of state examination for license to practise the healing art. The immense significance of state license is in the fact that there we see the coöperation of the sovereign people and the united medical profession, the laying on of hands of pontif and profession, the blessing and the commission of the majesty of the law, the will of a free people, blended and united with the spirit of the art of healing, the most humane among all the arts and sciences; the recipient of the state license bears an honorable commission to a noble vocation.

Agreeably to the legitimate expectation, coincident with the establishment of state license to practise medicine an evolutionary revolution took place in the medical schools of the country. Before the time under consideration many of the graduates of our medical schools were prepared to enter upon an honorable career in medicine, but some of the graduates of such schools were indifferently prepared to get an easy living in what they supposed to be a lucrative trade. To prepare men for the medical degree of the college was one thing, to prepare them for the state examination quite a different one. For the former, two short terms and a few—less than a dozen—teachers would suffice; for the latter, four long terms and many dozens of teachers were required.

For the former, a medical faculty in every hamlet was the cry; for the latter, let us unite and found a great university is the word, and the joining of hands of the sovereign people and the united profession in state licenses is but a thing of yesterday; of a single decade. We may be well assured that no single responsibility is comparable with that of cherishing and developing and extending the principle of state examination and license; to it must continue to flow our best thoughts, our highest endeavors, for from it must come, if come it may, that high standard of personal and professional excellence and preparedness, which alone may enable us to cope with the ever increasingly intricate problems of modern medicine.

This commanding occasion gives me an opportunity to remind you, that there are in this state three examining boards where there should be but one; that the responsibility for this

useless multiplication of official machinery rests primarily upon this society; that the people are aware of no good reason for this confusion; have but a scant and grudging patience with it, and that it is within our power, and in my judgment is our bounden duty to take the proper steps to make medical unity in state examination, unity in form as well as unity in spirit.

With a single board of examiners, representing the entire medical constituency of the state,—the entire lawful profession of the state, and therefore supported by the united medical profession,—we would be for the first time in position to expect and require of state examination a higher and still higher performance of its discriminating and selective functions. To some of the further practical demands upon our system of state license, demands of today, let us now for a few moments direct our attention.

I am informed that it has been from the first the wise policy of our state boards to raise the standard of examination from year to year slowly, but steadily; this course has without doubt been conservative and wise, and the large proportion of rejections indicate that the work of our teaching bodies is still far below the standard of the licensing body. However, it may be observed that the present standard of examination for license is not greatly different from that which obtained when the examination was inaugurated, whereas the provisions of our teaching faculties between then and now have changed greatly. Then terms of three months in two years, with lectures from a few teachers was the rule; now terms of six months, for four years, with instruction from scores and scores of teachers is the mode.

Is it not apparent, that the time has come, or will soon come, when it will be expedient to raise the standard for license in this Empire State so high that we may with truth declare of it, that there is none higher?

At present the severity of the test exacted by our examining boards of candidates for the state license is distinctly less than that for entrance to the medical service of our army, navy or marine hospital corps—is distinctly less than that of state examination or licensing examination in the chief countries of Europe. And yet the subjects of Edward or of William, of Italy or of France, neither deserve nor are able to reward better medical services than do the citizens of this state; it would be an easy and delightful task for a single state examining board

supported by the united medical profession to raise the efficiency of that profession in this state so high that all might know and feel, that in illness, in accident, or in childbirth, every citizen, even the humblest dweller in the city tenement or in far away forest log house, would receive the care and attention of a medical man of unquestionable ability.

Again, it is to be noted that the medical service of our state is by no means small in number or insignificant in importance. That a special examination should be held to test the fitness of candidates for this service, is a question deserving serious consideration. Possibly the growth and multiplication of specialists has not yet reached its limit and the specialist in hygiene may yet appear.

Certainly it is an important part of the duty of state examination to provide for the highest possible efficiency in all departments of the medical service of the state. The need of this requires no further argument than the bare enumeration of the more familiar of these positions. Our health officers, state and local, are charged with enormous responsibility, in the direction of patronage, the disbursement of funds, the protection of health, the prevention of disease; they are not known to be especially fitted for their onerous duties. It is generally believed that their efficiency might be increased. Our commonwealth and municipalities annually expend enormous sums in the support of institutions for the treatment or maintenance of the blind, the deaf and the dumb, the orphan and destitute, the insane, and the criminal; the medical service of these institutions is of vast importance pecuniarily, professionally, sociologically, and these medical men and women have received no special preparation for their work. Who will say that such special preparation might not well be undertaken, and that special fitness might not be properly tested by special examination by the state examiners?

Again, it is a matter of common knowledge, that the work of our coroners, and postmortem examinations made for our coroners, do not always show that order of expert preparation desirable. Undoubtedly economy in the administration of the law, precision in the determination of medico-legal cases would result if the office of coroner was always filled by a medical man especially prepared for his work; and medical men at least would have more confidence in the reports of autopsies if they knew that men authorised for such work had made special pre-

paration, and had given evidence of fitness, by passing with success a special examination by the board of state examiners.

Finally, we may not conclude these observations without adverting to the growing interest on the part of people and profession in the subject of school hygiene, and of medical inspection of our schools to the end that the health of the scholars and teachers may not be prejudiced by unhygienic conditions, and that the schools may not become the centers of distribution of the more common communicable diseases by reason of the attendance of pupils having the same. Here is work of singular importance, that possibly only awaits the appearance of the men and women properly prepared for it, whose fitness has been ascertained and certified by the proper authority.

It is confidently believed that the several subdivisions of medical practice before recited, constitute what might easily grow into a specialty of commanding importance, and of particular interest to the state and to preventive medicine, possibly sufficient to warrant the notice of our teachers of hygiene and of our state examiners. These practical observations are submitted for your consideration in the profound conviction, that the time is ripe for a sanitary organisation to engage in the work of forwarding the interests of the public health, to include the joined forces of the sovereign people, and the united medical profession of the Empire State.

SCIENTIFIC.

The diagnostics and the prognostics of the maladies of nations, these are the largest questions pertaining to this world, that can be pondered by the mind of man.

That all the dead, the living, the unborn, are one moral person, one for suffering, one for action, one for responsibility.

There is that in American character which has never yet been found equal to its purpose. There is that in American enterprise which shrinks not, and faints not, and fails not in its labors.

Your attention has been invited to observations of a more or less political nature, and again to those of a complexion more distinctly practical; it remains to lay before you certain conclusions arising from a contemplation of our subject upon a background of the science of medicine.

The science of medicine! Who of all our number does not feel his heart quicken with pride at the very sound of the words?

Who of us in years past middle life does not recall the heart-sickening horrors of our early practice, when confronted with the signs of early pulmonary tuberculosis, realising its inevitably fatal termination; or of laryngeal diphtheria in a child under five years of age, knowing our helplessness, and the hopelessness of the case, and the agonising scenes of the slow suffocation to death from laryngeal stenosis; or the signs attending acute peritonitis, remembering from sad experiences, from reading, and from instruction, the enormous proportion of fatalities in the wellnigh hopeless malady. How thankful we are that having lived to see and endure so much of the uncertainty, the helplessness, the hopelessness of medicine of thirty years ago, it has been graciously vouchsafed to us also to live and to work in a period when science has put into our hands such vast powers of making early and accurate diagnoses, and modes of treatment, surgical and therapeutical, of such immense power and life-saving efficiency. Thanks! and thanksgiving to Almighty God, just and honorable pride in our noble profession, laud and praise and everlasting honor to the men who have made, who are making, and who are yet to make the science of medicine; these sentiments are becoming and appropriate to the subject and the occasion.

Your attention was directed to the remarkable development which has recently taken place in our medical schools, a development which has already worked a substantial transformation in our teaching faculties, their equipment for work, and their mode of teaching. Without question this development is normal, is growth, is the product of natural forces, is to be permanent, and has but fairly gotten under way. In connection with this, three thoughts deserve our earnest attention.

Medicine, as practised at the bedside, or in the consulting room, has ever had a blending of science and art; the mode of teaching medicine from the days of Hippocrates to the last decade of the last century has been that of men who saw and hoped great things of the art and knew but little of the science. Our profession, nevertheless, has been free in spirit and has profited immensely by the contemporaneous advances in the allied sciences of chemistry, physics and biology, has contributed to the glorious galaxy of heavenly bodies a star of the first magnitude—the science of bacteriology, and by the light of this new luminary is rapidly advancing in the hitherto most discouraging of all her fields, and is day by day adding triumph

to victory, triumph in diagnosis, and victory in treatment. With the slow but surely increasing illumination of this department of practice, by the rising sun of scientific therapia, medicine may declare herself to be scientific in all her ways. The long and honorable era of the empiric teaching of the art of medicine has closed; the twentieth century finds the era of the demonstrative teaching of the science of medicine auspiciously inaugurated.

The importance of medical unity and of relations of confidence and sympathy with the people becomes manifest when we contemplate the cost for equipment and for maintenance, of numerous teachers, the vast libraries, the museums of specimens anatomical, physiological and pathological, the laboratories, chemical, biological, pathological and bacteriological, together with the facilities of hospitals and dispensaries, some of the prime necessities for the teaching of medicine of today. From Hippocrates to Koch is a long stretch in time and in method, but it is not greater than the difference in method and equipment between the medical college of the nineteenth century and the medical department of the university of the twentieth century.

Heretofore, we have directed your attention, not without conscious pride in the opportunity, to the fact that the spirit of medicine is free, that she wisely borrows, to profit withal from the discoveries and advances of the contemporaneous sciences. During the final decades of the last century the science of psychology has come into prominence, and has made invaluable contributions to the ancient and honorable art of pedagogics.

In part as a result of this, and in part from independent observations the theories and the modes of teaching of today differ widely from those of yesterday—methods have changed greatly and will yet change. My knowledge of the methods of teaching current in our various medical schools is not sufficient to enable me to inform you how far medical teaching has benefited by the current advance in pedagogics, but it is my great privilege to be permitted to congratulate you upon our fortunate situation. The University of the State of New York, the inspiration and head of our magnificent educational system, licenses such of the graduates of our medical schools as successfully pass the state examination. As directed by law, accurate record is kept of the standing of those examined, with records of those who fail to reach the standard requirement.

These records from year to year throw a beam of white light upon the methods, efficiency and success of our different teaching bodies, emphasising those whose pedagogical methods are deserving and winning success, and giving admonition and warning to others; that the struggle for existence is not confined to plants and animals, that in medical colleges only the fittest are likely to survive, that if our state standards of this decade are sometimes found to be inconvenient, those of the next decade may prove to be prohibitive. The question of medical teaching which shall be in accordance with the best medical traditions and principles, and also along the best pedagogical lines, is closely related to the question of large foundations, of endowments of chairs and scholarships, and this in turn is vitally dependent upon the sympathy and good-will of those who are rich in this world's goods.

Hitherto, mention has been made of the tendency of the times to develop for purposes economical, commercial or financial organisations and combinations, involving capital, employment, and product in quantities and proportions well-nigh fabulous, certainly beyond the wildest dreams of the men of business of half a century ago. This condition is not accidental, neither is it as some of the more timid assert, a sign of degeneracy of the body politic; but it is the legitimate result of free institutions under auspicious environment operating to produce and to accumulate the kindly fruits of the earth for the betterment and the enjoyment of the people, in such surprising profusion, in such enormous quantities as to verily indicate that this is the very promised land—that when our forefathers and our brothers shed their blood that there might be liberty and union on this continent, they did in fact and in confident faith seek the Kingdom, believing in the promise—and all these things shall be added unto you.

Of this we may be assured that as history will describe the last century as the age of preparation, of accumulation, in like manner the present century will be known as the age of distribution of performance, of accomplishment. Indications are not wanting that the American stage is being set for the performance of an honorable part in the drama of life. Certainly wealth is accumulating here as nowhere else in the world, and emigration is pouring into our country a vitalising, energising, progress-making stream of human life, all with upraised faces, of greater significance, of more hopeful potentality than the

combined products of our mines, our mills and our farms. Again it is to be observed, that the wealth of America is a consecrated wealth, consecrated in the highest and most intelligent degree to the beneficent purposes of constitutional government. The benefactions of our people in the last decade for charitable educational, scientific and allied purposes, is an almost incredible sum, and is a plain indication that the enormous wealth of the country is in the hands of men of high and noble principles.

The problems of the new century are before us. Which of those problems compares in interest, in significance, in importance to the welfare of the people, the maintenance of free government, to the progress of our race, with the scientific problems of state medicine?

How may we better prepare to meet those problems, than by striving for medical unity; hoping thereby to gain somewhat in numbers and influence and to improve distinctly in form—that our purposes may be the better understood by the people, that our institutions may be prepared to train men to the full stature of the science and art of medicine, that our legislature may enact suitable laws for the due protection of the public health, and furthermore that the sympathy and interdependence between the profession and the people may become so intimate that our sanitary codes and ordinances shall be everywhere intelligently obeyed.

Let us hear the conclusion of the matter. *E pluribus unum! Excelsior!* The spirit of America. The thought of the Empire State. The Zeitgeist of the twentieth century. The science of medicine. Never before in the world have these mighty thoughts carried such possibilities of duty, of conviction, of action, as now. *E pluribus unum!* Our theme is the all sufficiency of the law, concerning which it has been written, Of law there can be no less acknowledged than that her seat is the bosom of God, her voice the harmony of the world; all things in heaven and earth do her homage, the very least as feeling her care, and the greatest as not exempted from her power. *E pluribus unum!* Thus, for more than a century. We are many, we may be one. We are many, with all the indirectness, the confusion, the inefficiency, that ever attends disunion and disorganisation. Let us become one, one for the defense of the public health, one for the uplifting of every member of our profession, one for the promotion of the most humane, the most inspiring the most beneficent of all material

vocations, the science and art of medicine. *Excelsior!* When a regiment advances a company must take the lead. You hold in your hand a glass containing a solution of a given salt of a certain concentration. Your desire is that the salt shall evolve from the chaos of solution to the accurately, efficiently, organised form of crystalisation. You drop into the glass a single crystal of the given chemical and in due time chaos gives way to order, solution yields to crystalisation, disunion and disorder give place to union. The medical profession of America is without unity, or such organisation as becomes the free profession of a free and united people. What could be more appropriate, more inspiring, more eminently distinguishing, than the example of the Empire State, the state of the metropolis of all the Americas, the state of Alexander Hamilton, of Chancellor Kent, of John Jay, the state of enormous wealth, the state of marvelous achievements, of vast and bewildering possibilities, giving to the profession of America, an example of medical unity under the law!

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Henry de Mondeville, the Man and his Writings.

With Translation of Several Chapters of his Works.

BY CHARLES GREENE CUMSTON, M. D., Boston, Mass.

DURING the first half of the middle ages, both medicine and surgery had fallen to a very low level in France, and during this period there is not a single name of any surgeon of note that has been handed down to us. But the traditions of antiquity had been preserved in Italy, where, during the 12th and 13th centuries flourished a number of celebrated schools.

Obliged to leave his country on account of the triumph of a rival political faction, Lanfranc, of Milan, established himself at first in Lyons, where he practised for a certain time, and afterward went to Paris, where his practice and his lectures made him celebrated. He had for a disciple the famous Pitard, surgeon of the King St. Louis, who in his turn was first master and the friend of de Mondeville.

Thus, the traditions of the Italian schools became perpetuated in France by men of genius, and also it must be remembered that de Mondeville went to Bologna, where he studied under the celebrated surgeon Theodoric, Bishop of Cervia, the new

methods of dressings which the famous Italian surgeon had been promulgating.

The work of de Mondeville may be considered as a true and complete treatise of general surgical pathology, filled with interesting detail for those desirous of studying the progress and the development of surgery during the middle ages. It is, however, far from my intention to weary the reader with a complete résumé of such a vast work, and I am only desirous of here giving those parts having the most importance for the history of surgery, those where at a glance it will be seen in what way the present is united to the past and how the most magnificent discoveries often in reality have their origin in former times.

The chapter which de Mondeville has written on questions relating to the profession is of particular interest, because it comprises teachings which were totally unknown up to the time of his writing. At the epoch when de Mondeville flourished, there existed several types of surgeons. In the first place, there were the physician-surgeon clerks, which were created by the Schools of Medicine, and among this number may be mentioned William de Salicet, Lanfranc, de Mondeville, and Guy de Chauliac. On this point the old documents are absolutely positive.

Then there was the corporation of laity surgeons, founded after the model of those of other trades, having its masters and its "prudhommes," absolutely independent of the faculty of medicine. The master "chirurgiens jures" on the convocation and presidence of the first surgeon to the King, conferred a license to practise after the candidate had been examined. And, lastly, there were the barbers who practised blood-letting and other small operations which were turned over to them by surgeons belonging to the second class, and who had become physicians. At the commencement of the 16th century they formed the corporation of barber surgeons, which in the 17th century became transformed into the college of "chirurgiens jures."

In de Mondeville's time the physician-surgeons were the only ones possessing an adequate instruction, and for this reason he strongly advises those who wished to practise surgery to first study medicine. If, as it occasionally happened, the practitioners belonging to the second class above mentioned were in possession of a certain skill in operating, their absolute want of rudimentary education and general instruction prevented them from rising above a certain social level. This was much

regretted by de Mondeville, and he directed many attacks and sarcasms, accompanied by anecdotes, confirming his very unflattering statements regarding this class of practitioners. And for all this he certainly loved his profession passionately, and placed surgery above all other branches.

De Mondeville says that just as God ordains that surgeons should be honored like other men, so it shows from the acts and the chronicles that the Roman emperors, and the sovereigns who succeeded them, held surgeons in great honor and exempted them from taxation and common servitudes. In these bygone times the surgeons of the palace of the prince were called aliorum examinatores or archiatres.

De Mondeville says that the surgeon desirous of learning his profession should study, listen, discuss, read, and operate, that he should have a subtle intelligence, an excellent natural genius, and strong and agile hands. Since he gives himself up to a very hard and hazardous work, his salary should be greater than other artisans. Unfortunately, in these bygone days bad debts were far greater in number than good ones, just as it exists at the present time, and our author says in this respect that he has not as yet found a man rich enough, or rather sufficiently honest, no matter what his condition might be, to pay what he had promised without being pressed or forced to do so, from which arises the necessity of making arrangements and all kinds of concessions most disagreeable for the surgeon, who as long as he is not paid cannot stop demanding his reward, and should accept neither promise nor guarantee from the patient, but simply a bond or the money.

From these and other remarks that he makes we should not be led to believe that de Mondeville was avaricious or interested. He is of the opinion that a fee or a fixed sum should not be accepted from a friend, but in place of these he accepted victuals and jewelry, cloths, and cups as a sign of old friendship and not as a salary.

As to the poor, the true poor, because already at this epoch rich people came to consult the surgeon arrayed in old clothes in order to pay a smaller fee, de Mondeville never desired a retribution, he operated conscientiously for charity. But he is of the opinion that our art should not be lowered by demanding ridiculously small fees, and he believes that it is better to ask nothing than to allow one's self to be guided by the wish of the client.

In those days the practice of operating was particularly ungrateful, and even dangerous, not alone for the patient. The surgeon was legally responsible for the results he obtained, and in order to cover himself he obliged the patient to give his word that he would in no way do him harm in case the operation was unsuccessful, or else he would obtain the assent of people of rank who possessed authority in the city where he practised.

It was, however, in some cases exposing one's self to death in case of an unsuccessful result, and it is well known how King John, of Bohemia, had a French physician sewed up in a sack and thrown into the Oder because he could not restore his sight to him. And, lastly, at the time when de Mondeville practised everybody undertook the healing art, and this is why he says that ignorant and deceitful persons make fortunes and acquire brilliant reputations, while men of knowledge and who are frank and ripe in experience, miserably live. But it is more than astonishing, it is absurd, not only that these quacks and empirics, but kings, princes, dukes, prelates, and other authorities of the Church, nobles and bourgeois, mix themselves up in the science of dangerous surgical cures, and more especially in the treatment of diseases of the eye, which is very difficult and deceiving, to such a point that it is rarely that one finds a surgeon who is really an expert in these matters.

During the last few years the history of military surgery in the middle ages has interested the curiosity of medical historians, and has been the source of many researches in this direction, but unfortunately the documents left us are few in number and Guy de Chauliac, who gives a résumé of the writings of most of his predecessors, was never present at a single battle. The appearance of de Mondeville's book has thrown much new light on this very interesting subject, because as he says himself he was for a long time attached as surgeon to the person of the king, and to Count Charles de Valois in their expeditions against the English and the Flamands, and was thus able to write a very curious chapter on the extraction of missiles founded on his own experience, and which may be considered as a manual of military surgery of the time in which he lived. Darts, arrows, javelins, lances, and many other weapons were in use in those days, and the wounds produced by them were extremely varied, likewise the operative indications in different cases.

Towards the end of the 13th and at the commencement of the 14th centuries, the cavaliers wore thick armor covering them

from their head to their feet, which protected them quite efficiently against blows from swords and many other arms, but the armor was inefficient against sharp arrows which were fired with considerable precision by the archers. The armor was not proof against lances, and the wounds produced by them were very numerous and varied in nature according to whether the point did or did not adhere to the armor which it had pierced through, and likewise that part of the body which it entered.

The surgeon with the aid of a blacksmith was first obliged to remove the armor and employed very ingenious instruments for the extraction of these foreign bodies, usually in the form of pincers. Here is the operative technique as described by de Mondeville. The member which had been wounded by the arrow was tightly bound to a strong bit of timber and then the cord of a strong bow was put on the stretch as if to fire an arrow. The projecting end of the foreign body to be withdrawn was solidly fixed to the cord, which was then released, and de Mondeville says that he has seen this method fail but once. He also relates the case of a wounded man in whom an arrow had completely traversed the lower end of the femur at the level of the condyles. The foreign body could only be removed by hitting one of its extremities with an iron hammer after the limb had been firmly held on a column of wood, which had been hewn out so as to leave a space under the point where the instrument was driven out.

Usually speaking, the foreign bodies were removed by the opening through which they entered, but when they penetrated through the entire limb, or very deeply into it, they were withdrawn at the opposite side from which they entered after an incision had been made over them. The arrows used by the English were small and barbed, which rendered their extraction extremely difficult.

As I have already said, the work of de Mondeville contains many personal ideas and original thought on numerous points that he preached, and opinions are even found which would seem to belong to writers who had lived at a much later date. Thus the famous saying of Ambroise Pare, "Je le pansai, Dieu le guerit," is to be found almost textually when speaking of the extraction of foreign bodies plunged in the various viscera, which may be followed by immediate death, and also where abstaining from their removal will occasionally bring about unexpected cures.

But it is certainly by his method of dressing wounds that de Mondeville is deserving of a special place in the history of surgical science, because he may be considered as the true precursor of the modern antiseptic methods. Contrary to the doctrines taught in the schools of medicine, de Mondeville far from considering suppuration as a necessity, or a salutary vent, believes on the contrary that it is a very dangerous complication and one to be avoided at any cost. The method of dressing wounds that he advises, and which his former master, Theodoric, had inspired in him, may be summed up in the six following propositions: (1) sounds should not be inserted into wounds; (2) bones which compress or wound the surrounding structures must be removed and with violence if necessary, and likewise all foreign bodies which are found between the borders of the wound; (3) the borders of the wound should be united as far as possible; (4) the use of sutures is indicated for this purpose; (5) the wound should be fomented with hot wine and dried with sponges; (6) a plaster of his own invention should then be applied, spread out on a piece of cloth and covered with ordinary compresses wrung out in hot wine over which a bandage is applied. De Mondeville also advises the use of linen compresses in the dressing of wounds, which should not be renewed too often. We have here the practice of antiseptics of the first order, and also the occlusion of wounds as done at the present time. Abstain from passing sounds into the wounds, to wash them with hot wine, and then endeavor to obtain immediate union by sutures, and dressed so as to avoid the contact of the air, is certainly most extraordinary when we realise that these precepts were taught in 1306.

Unfortunately, these wise counsels were quickly forgotten, and fifty years later Guy de Chauliac, who held the scepter of surgery in the Occident, brought back the use of the old methods and the useful part played by the suppuration of wounds was again proclaimed. Shortly after de Chauliac, a very bold and practically unknown Italian surgeon, by name Petri de Largelata, gave distinct rules for the use of the drainage of wounds which he obtained by using the quills of the goose, and which was a sure proof of the fear inspired in him by the presence of pus in the tissues.

Nevertheless the use of antiseptic materials, which far antedated the writings of de Mondeville, still remained in practice and it is quite sufficient to read the works published at this

epoch in order to convince one's self of many substances used for dressing wounds.

Although abandoning the precepts given by Theodoric, a certain amount of surgical antisepsis was practised without the knowledge of those who used it, and up to the time of the great wars of the Revolution, and of the Empire, when the simple dressing was advocated, that is to say, an infectious dressing of the highest quality, the use of balsams and aromatics were had recourse to for the greater number of wounds and operations. At the commencement of the 19th century the precepts of the school of Broussais enriched still more those of the surgeons of the "grande armee" and of the Faculty of Medicine. The dressings with serate and charpie reigned without contest, and since this time and up to our days purulent infection and septicemia have raged.

The surgeons of the middle ages attached very great importance to the virtues of compound wines, tinctures, balsams and plasters, in the dressing of wounds, and consequently all their treatises on surgery contain what was then termed an antidotarian, which was simply a manual of materia medica destined to indicate the composition and preparation of these substances. The one contained in de Mondeville's works is particularly interesting concerning the history of drugs and plants of this epoch, and on account of its great exactitude and the detail I will further on in this article give a literal translation of two chapters from it.

The surgeons of the middle ages also gave potions which they considered very useful for the cicatrisation of operative or other wounds, and their formulæ were usually very complicated. De Mondeville was one of the first to doubt their efficacy and advised against their use.

Embalming entered into the attributes of the surgeon and appears to have been a means of considerable emolument for them. De Mondeville enters into very curious details concerning this subject, which aptly demonstrates to what a degree the endeavor was made at this time to preserve bodies. The ordinary methods were essentially defective because with few exceptions the abdomen was not open and the viscera were not disinfected, and it is not at all surprising that bodies thus prepared were not preserved like the Egyptian mummies, and that the tombs of the middle ages now only contain dust and débris of bones.

It is a fact that de Mondeville only enjoyed a relative celebrity among medical writers in the following centuries, and it is only by the work of Gui de Chauliac, who was his disciple, that de Mondeville's name has been handed down to us.

When printing was invented the writings of the older surgeons were published with a kind of passion, Gui de Chauliac in 1478, Lanfranc in 1490, William de Salicet in 1492, Bernard de Gordon in 1495, etc., most of which were published at Lyons. Alone, Henri de Mondeville remained in the dust of the libraries, and his name from this time was hidden in the most profound obscurity.

What we know of de Mondeville has only been obtained by what he has said of himself in his writings. His name is even written in varied manners in the different manuscripts. The French translation from the Latin, which is to be found in the National Library at Paris, calls him Mondeville in one paragraph, while in another it is Esmondeville. The Latin manuscripts give it as Mondavilla, or Mundavilla, Esmondavilla or Esmundavilla, Amondavilla or Amundavilla, Amandavilla, Mandavilla, Armandavilla, Hermondavilla etc., in which the termination of villa or ville, which is so frequently met with in the names of towns in Normandy, would lead to the natural conclusion that the subject of this sketch was a Norman. The greater part of these localities are to be found in Normandy.

The names most frequently met with in the manuscripts are Mondavalla, Mondeville, Esmondavilla and Esmondeville, at the present time called Emondaville. The Dictionnaire geographique et administratif de la France gives an Emondeville in la Manche in the arrondissement of Valognes, and a Mondeville in Calvados, arrondissement of Caen.

Master Henri de Mondeville was in all probability from one of these Norman villages, and he often mentions Normandy in his writings, either for the purpose of recalling names given to certain diseases in the language of this province, or for the purpose of recalling facts that he had himself seen, as for example, the cure of hydrophobia by plunging the patient into the sea. In some instances he gives the Norman form to the French words that he employs.

The date of birth of de Mondeville is unknown, but he died at Paris between 1317 and 1320. After having visited the celebrated cities of Italy, de Mondeville came to study medicine at Montpellier and surgery at Paris, and he made such progress

in both these sciences that he soon received the degree of Master.[1]

He professed in both universities with such success that the lecture rooms were crowded with students, the nobility and foreigners from all parts of Europe.

Quesnay says that in order to better introduce himself to the world, de Mondeville appeared to walk in the footsteps of Theodoric and Lanfranc, but that his taste was not that of a simple imitator. Being entirely free from the prejudices which so often lower the mind from authority, he himself judged of his masters, or at least he submitted them to a single judge who could decide their true merit, that is to say, to reason enlightened by experience. Those precepts which had been written and regarded as laws he brought down to their proper principles: he looked for the truth or for the confirmation in the diseases themselves, and not in the works and reputations of writers. The public, which is not always blind to medicine and surgery, was carried away, so to speak, by his singular merit, and Mondeville found in this public confidence an unusual reward. After his death his teachings remained for a long time as a guide to practice, and Gui de Chauliac, who quotes Mondeville 96 times in his works, places him among the greatest masters of his art.

Nicaise says that Mondeville appears to him to have an ardent mind, well nourished by much reading in letters and philosophy, as well as surgery. His honesty is evident, he speaks frankly, and no one escapes his criticism, not even the king.

Mondeville was the surgeon to two kings of France, Philippe le Bel (1285-1314), and his son Louis le Hutin (1314-1316), whose body he embalmed. He professed both at Montpellier and at Paris, and as I have already indicated, his lectures were given with great éclat. He was in France, with his master, Jean Pitard, the surgeon to St. Louis and of Philippe le Bel, the most illustrious representative of surgery at the end of the 13th and the commencement of the 14th century.

For the time in which he lived de Mondeville was a sage, occupying a high position, the highest that could be attained in surgery at that time. He was also a distinguished professor and up

1. NOTE.—Since he professed surgery in the Faculty of Montpellier and later was in Paris as physician to Philippe le Bel, he consequently must have practised both physic and surgery. He must have received the degree of M. D., otherwise he could not have professed in the University of Montpellier, and there is no doubt but that he practised surgery at Paris, since his name appears in the Index Funebreus Chirurgorum Parisiensinum, ab anno 1315 ad annum 1529.

to the epoch of Gui de Chauliac in 1305, his surgery was the best compilation, the best manual, and the best regulated of any that had existed. It should also be remembered that it was the first work written by a French surgeon.

De Mondeville's style is not as dry as might be expected in a didactic work. Although using scholastic Latin, the universal tongue of the middle ages, he gives from time to time specimens of his caustic humor, especially directed against women in his quality of a bachelor, and he does not use them lightly. For example, he reproaches the ladies of Montpellier of lacing their breasts too tightly, and not enough the rest of their body, and even in the study of anatomy he finds the opportunity of maliciously attacking them, an example of which I extract from his treatise:

Et fuit huic membro hoc nomen veretrum impositum ab hominibus sicut patet per modum loquendi Haly supra tegni tract. De causis cap. 37 dicentis: vidi virum qui habebat veretium, testiculos et vulvam. Sed virga et membrum sunt nomina imposita huic membro a mulieribus per excellentiam sicut patet per modum loquendi earum et causa.

In spite of his professional gravity, he occasionally found a time for jesting, as will be seen by these quotations, as well as other paragraphs in his writings.

Mondeville had a high idea of his profession and placed it even above medicine. His desire was that the surgeon should be at the same time a physician.

Surgery in the 14th century was only a manual avocation, and the surgeons were merely at the beck and call of the physicians, and it must be admitted that the large proportion of the former were ignorant and illiterate. Surgeons cultivated in letters, as was de Mondeville, were the exception, and although they endeavored to suppress charlatans and other quacks, the people and even the nobility continued to place their confidence in the latter class of practitioner. I here give a short extract regarding this matter from the French translation of the Latin of de Mondeville's works, the manuscript of which is preserved in the National Library at Paris:

Toutevoies je me met pas hors du tout en tout ceux qui ne sont pas letrés (que ceste oeuvre profite) ou non. Je di que il est aucuns d'iceus, aussi comme ydiotes, simples et ignorans, et sont merveilleusement orgueilleus et despiteux en cuer, disans que il ont l'oeuvre de cyrurgie, malgre les clers cyrurgiens, de lor parens et de leur predecesseurs et de si lonc temps que il

n'en est memoire et dient que il ont d'oir en oir, aussi comme de heritage et de nature; et les croient les lais de ce que il dient, aussi conne parchonniers et compaignons de lor folie; et ensurquetout es jours d'ore les nobles et les princes les croient et par eulz tot le pueple, dont il avient mout de fois griés et maladies perilleuses et aucune fois mort; pour la quel chose a tieux orgueillous qui ne sont pas letrés et se dient cyrurgiens nostre devant dite doctrine ne soit de rien aidant ne a leur paciens, ne a ceux qui les croient, tout aussi comme Dieu ne secourt pas ceux qui l'ont en desdaing.

Or sont autres cyrurgiens, qui ne sont pas letrés qui ne sont pas rebelles et sont plus familiers et se duellent outre maniere que il n'ont conneu la science des letrés en l'art de cyrurgie et recognoissent bien que tel petit de science que il puent avoir aquis, que il l'ont eue des mires et des cyrurgiens letrés. A ceus nostre doctrine soit otroiee et soit profitable a lor salut tant pour eulz comme pour leur paciens en leur maladies; tout aussi comme Dieu ne deneieroit pas pardon a cil qui li requerroit humblement.

The state of surgical science was quite as miserable as its practice, and the Arabs and the Arabists were the principal sources of instruction. Experience was a thing then unknown and was replaced by syllogism to the extreme, and where observation should have come in play all that was done was to quote other writers. The subtilities of dialectic took the place of observation and the most unheard of reasonings explained the natural phenomena.

Surgery had, however, been raised out of this miserable condition in Italy, first by the School of Salerno, and then in the 13th century by that of Bologna. Such treatises on surgery from the pen of Brunus Longobardicus (1252), Theodoric de Lucques, Archbishop of Cervia (1265), Guillaume de Salicet (1275) and that of Lanfranc, of Milan (1296), all of the School of Bologna, served de Mondeville as models for his work, especially that of Theodoric for his treatise on wounds and ulcers and that of Lanfranc for the remainder.

In point of fact de Mondeville was not an original writer, nor was he one of these imitators which advance science. As he himself says in his preface he proposes to write his work on surgery in five treatises, the first of which taken from Avicenna comprised anatomy for the use of surgeons. The second treatise takes up wounds and ulcers after Theodoric; the three other treatises were borrowed from Lanfranc.

The third treatise comprised all diseases *a capite ad calcem*, excepting fractures and dislocations which were to form a fourth

treatise. This fourth treatise was never written by de Mondeville because death overtook him before he had even finished the third treatise. But before this he had had time to write the fifth treatise, called the Antidotarium, that is to say, a collection of medicines and remedies such as would be called in later years a surgical pharmacopeia. This division is about the same as that found in the preceding surgeries; among others the one by Lanfranc, and sixty years later Gui de Chauliac adopted no other.

The first two treatises on surgery by de Mondeville were in the first place published from 1306 to 1312, and they form, so to speak, the first edition; the first only differs from the later editions by a few unimportant corrections. This first edition is represented by three manuscripts, one of which is to be found at the National Library at Paris.

The second edition comprises all that de Mondeville had written of his surgery—namely, the first treatise is on anatomy, the second on wounds and ulcers, the third on special diseases, while the fifth, the antidotarium, is represented by four manuscripts, all of which are preserved at the National Library at Paris.

As this latter work of de Mondeville's is a very excellent specimen of its kind in those days, I will here give a literal translation of the second and third chapters of this work, which I believe to be the first ever produced in English. The second treats of the "Repercussiva," while the third deals with the "Resolutiva."

Chapter II.

This chapter is divided into three parts: (1) special preliminary remarks to introduce the student to the subject; (2) the medicines; (3) explanations.

(1) Avicenna in his Treatise on the Effects of the Different Medicines (Book 2, Section 1, Chapter IV.) says: The repercutive medicine acts in a directly opposite manner to that of an attracting medicine. It cools and densifies the member to which it is applied from its coldness, blunts its attracting heat, contracts its pores, hardens and densifies in one respect the humors which are flowing to the member so that they are not received into it, in the other respect it hardens and densifies the member itself, so that it prevents the humors from entering into the limb. This, for instance, is the effect of solatrum, and Serapio agrees on this point, saying in his Aggregationes, in the fourth sermon: On the

Division of the Effect of said Remedies, "the repercussiva must be cold, of a dense or styptic quality, in order that they may energetically repel." He says also, that besides that there are several kinds of repercussiva, the cold and moist, the non-styptic, the cold styptic, the tonifying, the densifying, the contracting, the expressive, and the opilative. The properties of the various repercussiva are described by Avicenna and Serapio, in the chapters referred to. The cold and moist repercussivum is designated in the above extract from the latter mentioned author, as "inspissative," in contrast to the "rarifying." It contracts the ducts and small pores, but not in every direction as due to these styptic repercussiva. The styptic forms contract the openings of the veins, they are earthy, dense, cold, and have an acrid, but not pungent taste; owing to their density they remain adherent on the outside and cannot penetrate within the contracted pores, and therefore are excluded from the depth of the tissues, but contract the structures by means of their coldness and densify and tonify them.

Serapio calls them impulsive, because they propel humors which they encounter into the interior of the body. The tonifying remedies have the property of toning up the composition and condition of the anatomical structures and modify them in such a manner that the limb will not receive the excessive affluent matter or injurious substance. Some of them effect this by the virtue of an inherent property, such as seal earth and theriac; others, like oil of rose, by virtue of their composition. The densifying remedies condense the humor which they encounter by hardening and densifying it. The contractiva contract the member and render it dense. The expressiva compress the member and thus expel the humors, just as the wine is pressed out of the grape by the press. The opilativa block up the pores and ducts in the member to which they are applied because of the siccative and coagulating properties they possess.

The attractiva act in a directly opposite manner from that of the repercussiva, and since this latter class of remedies have not as yet been treated, I will mention on account of their importance, that they by means of their heat and their subtle qualities attract the humors from the depth of the tissues to the point of application of the remedy.. This quality proves to be of great use in ischias, after a purgative has been administered. In the same manner on account of their qualities the remedies remove thorns, arrows, etc., thus castoreum, for example, acts.

From what has here been stated it plainly emanates that all true repercussiva are cold, and it also emanates at the same time how and where they act, that is, only in hot materiæ, for a cold matèria is never actually in the true meaning of the word repercussed (driven back), even if it is devoured and destroyed by those remedies which possess some heat, so that the hot remedies, because of that similarity are also called in a certain sense, but only because of a certain misnomer in the expression, repercussiva, which however does not correspond to facts and to the actual condition, therefore only the cold remedies are designated as actual and true repercussiva in contrast to the hot ones. The cold remedies only act against the circulating hot materiæ, and all flow of the humors from limb to limb.

The hot remedies are indicated when cold materia is circulating.

The cold repercussiva are of two kinds; one kind represents the repercussiva in the true and strict meaning of the word, the other in a less strict, wider and incorrect sense.

The former force the approaching materia from the outside inwardly and are appropriately prescribed where the amount and quality of the matter create danger rather than any sharp heat produced by the matter, as is the case with bloody materia, which the experienced surgeon will be able to diagnosticate by palpating with the hand, inspecting it with the eye, as well as from the history obtained from the patient. Now these remedies are in part moist and in part dry, but all of them are styptic in nature.

The second kind, those incorrectly termed repercussiva, are all moist, they never drive back within the tissues any matter which is being discharged outwardly, they merely cool and densify this matter which is flowing to the limb and the member itself, so that after a time no matter is absorbed. They are only indicated when the burning and intense heat are of more danger to the patient than the quantity of the matter present. Such for instance is the case when the matter is purely of bile.

(2) Of these two kinds of remedies, the true and the improperly called repercussiva, some are simple while others are compound. The true styptic repercussiva are the following: solatrum, crassula major et minor, portulao, virga pastoris, psilium, hyoscyamus, hedera, acedula, scariola, the water lily, plantago major et minor domestica et silvestris, the leaves and buds of the unripe fruit of the oak, pear tree, quince, ash, cherry, plum tree, the grape

vine, the wild rose, the willow, the poplar, the reed, the asp, rushes and similar things, barley, wheat, oats, lolium, sumach (an Arabian name for a kind of bark used for tanning), barberries blueberries, sour grapes, thorn apple, psidia balaustea, roses, anthera, Armenian clay, cacyimia (a late Latin expression for cadmia and other impure zinc oxydes), potter's clay, nerda ferri, coral, antimony, mandrake, verbena, hepatica, corrigiola, pepper, umbilicus Veneris, maidenhair, sempeviva, hypocistengrass, bean juice, gratia dei, and also all juices, waters, and oils, as well as the substances themselves and all other extracts that can be made therefrom.

The simple hot repercussiva, as they are usually called, although incorrectly, are the following: spica nardi, absinth, cabbage leaves, fruits of the cypress, both kinds of hoarhound, fumitory, cimolith, white lead, seal earth, all kinds of putty, clay, acacia, and all juices, water, oils, flours or powders, that may be made from these substances and also to the whole substance itself, either alone or in combination with others.

Repercussiva in a wider sense of the word, not actually the genuine ones, but such as, with respect to the hot remedies, must still be designated under this term, are the following: atriplex, mercurialis, malve, violet, cold water, vinegar, radish, squash, cucumbers, the seed of the malve, the so-called four cold seeds, manopilium montanum, both kinds of lavender, myrrhs, incense, mastiche, alum, salt, sulphur, oil of rose, squinantum (a kind of perfumed rush), abrotanum, corn flour, both kinds of aristolochia, all simple bitter medicines which do not exceed the second degree of heat, again all such remedies that can be made separately or mixed from the above mentioned substances, such as oils, waters, juices, powders, flours, and the substances themselves.

Regarding the manner of forming compound remedies from the single ones, and as regards the method of their application, three general rules are here given for the three classes referred to.

(*a*) The surgeon takes from one or several juices of one, or several herbs, or of leaves, or of similar drugs, as above mentioned, and such as may be suitable for his purpose, and adds them to three parts of oil of roses or any similar oil, one part vinegar and one-half part of seal earth or clay, so that a mass having the consistency of honey is obtained.

(*b*) For all compound materia, such as may be composed of blood or other cold and warm humors, the surgeon should apply

compound local remedies in accordance to the composition of the materiæ, taking more of the above mentioned cold moist, repercussiva, when bile prevails, and in the same manner is he to proceed with the single materiæ of other types, such as the sanguinous, the phlegmatic, and others that may predominate in the composition, and if such materiæ be present in equal parts he is to prescribe the suitable repercussivum for each materia present.

(*c*) Before applying any local remedy, the surgeon should ascertain whether the materia upon which he proposes to operate is hot or cold, and if it be hot whether of a sanguinous or bilious composition, and if it be the former only styptic repercussiva, either alone or in combination, are to be used continually. When the surgeon is dealing with a bilious condition he should apply moist repercussiva which are devoid of styptic properties, either alone or in combination. If the matter is cold he is to apply simple or compound hot comforting repercussiva. In each of the above mentioned cases the above indicated remedies should be continually applied without confounding those which should be used in one case and those that are indicated in other conditions.

He (the surgeon) must never abandon the usual remedy until the desired effect is obtained unless this effect should be delayed beyond measure; then it is quite permissible or even advised to resort to one of several others (drugs) that have the same power and effect, while the condition of the patient remains the same.

The repercussiva which are composed of the above or similar simple drugs, are salves or quasi-salves, numbering twelve in all.

No. 1. Unguentum de fensivum commune, which has been often mentioned in the foregoing pages, is composed as follows:

Rp. Boli armenici unc. 1, olei ros. drachm 3, aceti drachm ½.

If there is fear of a general affection arising, or that it should increase in extent, such for example, as in erysipelas, then a half drachm of seal earth should be added to the above formula. This unguentum when spread around wounds will prevent the formation of acute abscess, erysipelas and hermes, and prevents the spread of general infection and aborts acute tumors wherever it may be applied.

No. 2 is for the same purpose, and is composed as follows:

Rp. Succorum solatri; sempervivæ ana lb. ½, boli unc, 1, ol. ros. unc. 1, aceti unc. ½, are to be mixed together.

No. 3. The same uses. Rp. Sandali albi, spovii acaciæ, ana drachm 2, camphoræ drachm 1, opii drachm ½, mix with the juice of any suitable herb and white violets, and a little vinegar.

No. 4. Sandali rubei unc. 1, camphoræ drachms 2, solatri, sempervivæ, ana a handful; rub up and mix with two ounces of oil of roses and one drachm of rose water. This unguentum checks all flow of the heating materiæ, and also contributes to the protection of the heart against all poisonous matter.

But all the above local remedies and other similar ones, must be smeared around the site of the affection and not upon it, until a phlebotomy has been done, or until some other evacuation has been made, except in such cases where the last mentioned plaster is to be directly applied to the heart in order to protect this organ from the poisonous matter.

No. 5. Warm bran with strong vinegar.

No. 6. An ointment made of white wax and oil of roses, Galen's cerate, will warm the lower temperature and cools overheated matter, (or regions?), it never harms and usually does much good. If it be dissolved and frequently spread on cold water or snow, it will then repercute the bilious matter most excellently. This ointment is prescribed by Galen (IX. de ingenio, Chap. V.), where he discusses the cure of priapism.

The following preparations are valuable, especially for pains in the joints.

No. 7. Starch and camphor in equal parts are pounded together and mixed with rose water, and then applied.

No. 8. White bread crumbs unc. 1, opii unc. ½, mixed with cow's milk.

No. 9. Ol. ros. unc. 1, ceræ unc. ½, to be melted and washed in rose water, then add croci drachm 1, opii drachms ½.

No. 10. Apply lana succida soaked in plain lukewarm vinegar.

No. 11. Lana succida moistened with vinegar to which has been added a decoction of red roses.

No. 12. Flour mixed with the juice of solatrum and a little vinegar.

(3) In this section are given the explanations of which there are five.

(1) Do not be amazed that I have given so many remedies for a single purpose, for as has been seen the same medicine does not help in each and every example of the same disease; besides, all these remedies are not to be found everywhere, and

if they are to be obtained they cannot be procured in all seasons, and even if they are found everywhere and in every season, the poor are unable to purchase the more expensive ones.

(2) If the surgeon repercusses in such matter for a considerable length of time, until the region commences to take on a dark discoloration, he must avoid continuing the use of the purely cooling remedies, and he should add some resolutiva or compound local remedies from the juice of solatrum, coriander and cabbage, mixed with barley, bean or other flour.

(3) If an abscess be not repercussed, nor commences to take on a pale blue color, nor is absorbed, but remains the same, becoming neither larger nor smaller, and if the heat and burning present in the diseased structures decreases in intensity, then the surgeon should add resolutiva to the repercussiva, diminishing the latter continually until he does away with them altogether, using only the resolutiva. And although the latter are now applied for the continued treatment of the abscess, they are not to be applied to the abscess itself, but the surgeon is to spread them around the abscess, more especially at that part through which the humors are conducted from the body to the diseased spot.

(4) The most generally accepted opinion is that no abscess can be repercussed or dissolved, and that it is better if it is drawn out and made to suppurate in order that nature may by its means purge the body of the deleterious humors. If, however, the surgeon endeavors to increase the growth and the suppuration, then some say that he does it for malice. If, on the other hand, he repercusses the materia in a rational way and prevents the formation of an abscess, and if after some time the patient should be ill with some other malady, others, or perchance the same people, will accuse the surgeon because he drove away the abscess for personal motives. What is the surgeon to do since he cannot escape criticism, since there is no middle way to be found and since for all that he must act nolens volens? One may say the surgeon should leave the choice to the patient and then proceed to act. If, however, the patient does not select and forces the surgeon to choose, then he must do so, and if he can prevent the formation of pus according to the existing rules, he is to follow what has been explained in Notabel, Chap. III., doctrine 1, treatise 1, having for title the treatment of head injuries and of fractures of the skull, that is, in that part having the following title: "Which is the Better and Most Healthy

Treatment of Wounds, and Similar Injuries, that, Where as far as is Possible the Formation of Pus is Prevented, or that where it is Fostered?"

(5) Now as opium and other narcotics and stupefactives enter into the composition of certain repercussiva, it should be noted that all of these remedies cool on account of their styptic property, whether given internally or applied externally. If they are given internally, in small quantity and diluted by combining with other remedies, they quiet and narcotise, by blunting the sensibility. But when they are applied in large quantities and undiluted, they have a lethal effect and produce the same symptoms on the member to which they are applied in excess. If given in small amounts they only dull its sensibility, they destroy the composition of the member if given in large quantities and thus actually stop the pain, as it is said that the pain is stopped for good in a dead person, since he no longer feels it. Such remedies are opium, mandrake, solatrum, all kinds of henbane, except the white, and all kinds of poppy except the white one. The action of these remedies is more pronounced if they are dry, and amongst the dry ones the following are the most effective: the bark and root of mandrake, the seed of henbane, and of the white and not of the black kinds of poppy. We must warn our disciples against the strong narcotics, and they must be used in small doses and are to be proscribed if death threatens.

(*Concluded in the March number.*)

Uterine Fibroids or Myomata.[1]

By J. F. MYERS, Sodus, N. Y.

A FIBROID or myoma is defined as a foreign growth or tumor composed of connective or muscular tissue.

Pathologists (Delafield and Pruden) divide myomata into two general classes in accordance with the physiological division of muscles in general: (1) cleiomyomata; (2) rhabdomyomata. We quote from these authors as follows:

In the first-class we find the characteristic elements to be fusiform smooth fibers with elongated rod-shaped nuclei. These fibers are packed closely together and may interlace, branching in different directions, and are intermingled with more or less vascular fibrillar connective tissue. When this

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 21, 1902.

connective tissue is present in large proportions the growth is called a fibromyoma. It is not always easy in sections to distinguish these myomata from certain cellular fibromata. But if we note the shape of isolated cells, their nuclei and their uniformity in size, it will usually suffice. These tumors sometimes become infiltrated with lime salts until they are completely calcified and stone-like. Because of their density they may undergo cystic degeneration, or a large portion of the tumor may become gangrenous.

The tumors of the fibrocystic form are the largest tumors which grow. Dr. Kelly describes a case in which the tumor weighed 59 pounds.

These tumors may be single or multiple, large or small, are of slow growth and benign. They occur most frequently in the uterus, where they may be multiple. They have been found wherever smooth muscular tissue exists. They may be found in the muscular coat of the gastrointestinal canal. They have been found in the bladder and the skin of the nipple and scrotum. The enlarged prostates of old men are cleiomyomata of the interstitial coat.

Class II.—In these rare tumors striated muscular fibers form the characteristic elements. They very rarely compose a great part of the tumor but are intermingled with other elements, fibrillar connective tissue, spindle-shaped and spheroidal cells of various forms, which often appear to be incompletely developed muscle cells. They are not infrequently associated with sarcomatous tissue. Bloodvessels and sometimes nerves are also present.

These muscle fibers differ as a rule from the normal striated muscle fibers in their arrangement, which is quite irregular, and in their size, being in general smaller than normal fibers although varying greatly. The sarcolemma is either absent or incompletely developed. These tumors are usually small or of moderate size and are supposed to originate from the inclusion of cells intended for muscle cells in places where they do not belong. In the heart and certain other muscular parts small circumscribed masses of striated muscle tissue have been described. They are sometimes called "homologous rhabdomyomata." But genuine heterologous rhabdomyomata are in almost all cases thus far recorded confined to the genitourinary organs, kidney, ovary and testicle.

Dr. Prudden describes a case of rhabdomyomata of the parotid gland, and says: "These tumors when not associated with sarcomatous tissue, are usually small and benign and are of more theoretical than practical importance."

When a woman in middle life consults the physician, complaining of prolonged, excessive and painful menstruation, with

her periods extending over many days, so that she is sick the greater part of the month, being sterile, and perhaps having had one or more miscarriages in early life, the physician should suspect the presence of a myoma and advise a physical examination, which alone can decide its presence or absence. Putting the patient in the lithotomy position, with bimanual examination, we ascertain in a general way the size of the uterus, the presence and size of the tumor. Then, with the uterine sound, we ascertain the exact length of the uterine cavity. Then it is necessary to ascertain the relative position of the tumor to the womb.

Having first prepared the patient with an evening laxative and a morning enema, thoroughly emptying the lower bowel and rectum, with the patient in the lithotomy position, we seize the cervix with vollsellum and draw the uterus well down and may then place the forceps in the hands of an assistant. With one finger in the rectum and the other hand on the abdomen we can thoroughly examine any unevenness or nodules on the surface of the uterus and the relation of any foreign growth to it. We may often ascertain whether the myoma is pedunculate, sessile, interstitial, subserous or submucous, which knowledge is essential to a proper treatment.

PROGNOSIS.

Comparatively few of these growths cause symptoms sufficient to be called to the attention of the surgeon, and the tumors themselves, unless so located as to cause symptoms, are histologically quite harmless. The submucous tumors, when occurring in young women, may, by causing menorrhagia, so weaken the patient as to incapacitate her and cause years of suffering. The menorrhagia may be so excessive as to endanger life at the menstrual period. Some growths originating in the cervix and extending up into the body of the uterus and tubes may cause so much pain as to render life a burden. Some of these submucous growths may be extruded from the cervix and can easily be removed as an ordinary polypus.

After the menopause myomata may atrophy, except where cystic degeneration has taken place. The fibrocystic tumors continue growing till by their size and weight they make life a burden. Myomata may by their position and form become lodged under the brim of the pelvis so that their pressure and growth is in the direction of least resistance on sensitive

pelvic viscera, causing most uncomfortable symptoms. They may press upon the ureter, causing hydroureter, which may be followed by pyelitis and nephritis. They may undergo gangrenous degeneration and sepsis may follow, which is another menace to life. They may also be associated with sarcomatous tissue, which is sure to prove fatal if not removed early.

It thus becomes a serious matter to be the possessor of a myoma.

TREATMENT.

Treatment is expectant or palliative, abortive and radical. The expectant or palliative treatment consists in watching and treating developing symptoms, which in some cases is to allow nature to take its course.

Menstrual hemorrhage, which Dr. Howard A. Kelly calls the most dreadful symptom of myomata and says occurs in 50 per cent. of cases, in the submucous varieties, may be treated by keeping the woman in bed during the menstrual period and administering ergot, opium and cannabis indica in proper doses.

Curetage of the endometrium with after applications of astringents is also an effective measure in these cases. Kelly also says that the most efficient alterative to the endometrium we have is the application of electricity. With the positive electrode in the cervix and the negative pole covering a large area on the abdomen we employ from 50 to 150 milliamperes.

In the abortive treatment small injections of ergot twice a day for two or three months has been known to cause a retrogression in their growth. A spear-pointed positive electrode, scrupulously aseptic, may be plunged into the substance of the submucous tumors and in a few cases will arrest their growth although accompanied with the dangers of sepsis and gangrenous degeneration. Ovariotomy was once a laudable abortive measure. Tait performed 271 ovariotomies to hasten the menopause and thus expedite their retrogression. He completely cured 257 cases. The writer does not often resort to the above forms of treatment because of danger of sepsis and gangrene.

In cases that lodge under the brim of the pelvis, if the adhesions are not too strong, we may attempt to lift them by the use of pessaries or tampons out of the pelvic into the abdominal cavity, where there is more room; or, they may be carefully manipulated where the adhesions and vascularity do not endanger life from internal hemorrhages and inflammations. In cases

too difficult or dangerous for vaginal manipulation an exploratory laparatomy may be done; and where it is not feasible or possible to do a myomectomy or a hysterectomy, because of advanced age or an enfeebled condition of the system, the adhesions may be broken up to such an extent as to allow the myoma to be raised above the brim of the pelvis into the abdominal cavity, where it has more room. The writer never resorted to these palliative measures from choice, but solely where operation is refused and it is the only alternative.

Of the radical operations myomectomy is the more conservative and is growing in popularity in the hands of experienced surgeons. This is easily done in case of pedunculate tumors which have emerged from the interstitial tissue of the womb, and also in the subserous variety. Dr. Howard Kelly reports a case in which he enucleated nine fibromata, leaving the uterine tissue mostly intact.

These incisions must be very nicely closed and hemorrhage perfectly controlled. This operation is more dangerous in inexperienced hands because of post-operative hemorrhages. The surgical technique must be as nearly perfect as may be, to have this operation a success.

The hysteromyomectomy is more easily and frequently done, though less conservative. This can be done either by the vaginal or abdominal routes. In cases where the myoma is not too large the writer prefers the vaginal route, because there is with this operation usually less surgical shock and consequently less danger to life.

In case of the larger growths the abdominal operation is resorted to and terminates successfully in a large majority of cases. The technique of the above operations I will not attempt to describe as they are so familiar to all.

Case I.—Mrs. A., aged 45, entered the hospital October 20, 1901. There was a good family history, the parents and grand parents having lived to advanced ages. She had been suffering at irregular intervals with prolonged and excessive menstruation and constantly with pain, irritable bladder and other symptoms caused by pressure in such cases. She was quite anemic from the loss of blood at different times. Physical examination revealed the presence of the myoma you see here. I operated October 27, by laparatomy.

Her pulse was 150 before the operation. A hypodermic of strychnin and brandy brought it down nearly to the normal. I removed the uterus and one ovary. I had to rapidly

bring the operation to a close because of symptoms of collapse. We administered hot salines and hypodermics of atropin and strychnin alternately, and by evening the patient came out from under the anesthetic with pulse of 140 to the minute. October 28 the pulse was 120 and temperature 99°.

October 29, the pulse was 100 and temperature 100°, after which time convalescence was uninterrupted.

Case II.—Mrs. B., age 39 years, entered the hospital November 30, 1901. Family history—her mother died two hours after her birth, the cause of the death being eclampsia. She was brought up by strangers and knew nothing of her father's history. Her mother's father died with tuberculosis. Her mother's sister died with cancer in the left side (exact locality not known.) One aunt had a cancer of the breast removed and is still living. She was very nervous and in a general hyperesthetic condition and complained of pain in the back and left side.

There was a history of severe obstipation of five years' duration. She said when her bowels did not move she could smell it in her nose and throat. She had been married twenty years and had had no children. Had had one miscarriage in early life and there was no menstrual flow for one and one-half years after the miscarriage, and always after that a very slight show.

Physical examination revealed a retroversion with the fundus bound tightly down on the rectum, and a small growth in the body of the womb which was at least of five years' growth. I did a vaginal hysteromyomectomy on her December 4, 1901, with the ordinary uninterrupted convalescence.

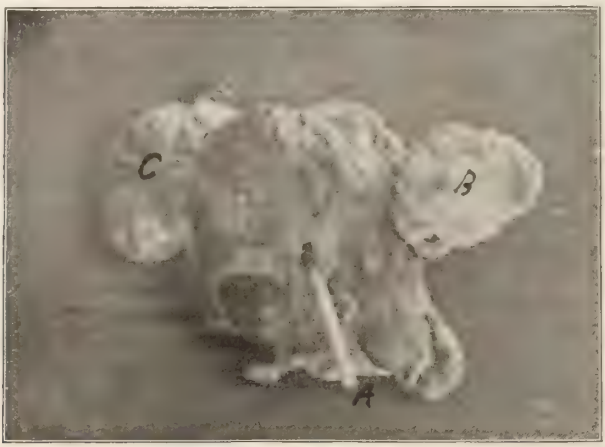
There is one point which these two cases illustrate when contrasted with each other, and that is the great difference in the rapidity of growth. The smaller of the two is of certainly five years' growth, while the larger is of only about three years' growth.

Case III.—Mrs. C., aged 62 years. Had been married 45 years. She was the mother of three children, all healthy. She entered the hospital December 3, complaining of darting pains beginning in the pelvis low down and shooting in all directions. She was also suffering from bronchitis and a very troublesome cough. She had stopped menstruating ten years previously. Physical examination revealed the presence of a uterine growth, and also acute bronchitis. After a week's treatment the bronchial trouble subsided.

Under protest, because of her age, I had her anesthetised and attempted a vaginal hysterectomy, but everything was so rigid about the pelvic organs it could not be done. I therefore did an abdominal hysteromyomectomy and removed this stone-like uterus, which I show you.

The ovaries were also calcified. The woman died in the evening. I afterward ascertained that she had impaired her nervous system by taking morphine and chloral hydrate. Had I known this, I should not have attempted the operation under any consideration.

This uterus, as you see, has undergone a calcareous degeneration and is perfectly stone-like. Of course, this would have remained dormant and never have grown any, but in this particular case caused sharp, darting, burning pains, radiating in all directions, for which cause it was removed.



MYERS; FIG. I.—CASE III. CALCARIOUS TUMOR DEGENERATION.

(*a*) Represents the former location of the cervix.
(*b*) Represents the left ovary.
(*c*) Represents the right ovary. Both ovaries are calcified.

Case IV.—Mrs. J. D., aged 27 years, entered hospital complaining of a very troublesome muco-sanguineous discharge lasting from one menstrual period to the next. This discharge was nearly constant for three years. Her father and mother, brothers and sisters all living and in good health. Her husband was in good health. Physical examination revealed a cauliflower growth in the cervix which was much larger in life than the specimen is now. I did a vaginal hysteromyomectomy on her after the usual preparation. She was up and dressed in two weeks and was discharged from the hospital three weeks after the operation.

Case V.—Mrs. E., aged 30, came into the hospital June 25, 1902, complaining of pelvic pains and distress of five years' standing. Her family history was good. The father and mother

were alive and in good health. She complained of pain in the back and an irritable bladder and dyspareunia which seemed to plague her more than anything else. Physical examination revealed a uterus in the second degree of prolapse bound down firmly. There was also subinvolution. The womb was large and very sensitive to the touch. There was an endometritis.

She was told that she could have a curetment done and adhesions loosened and round ligaments shortened, or a hysterectomy. She decided to have the hysterectomy done. I therefore did a vaginal hysterectomy on June 30. The patient was up and dressed July 10, and discharged from hospital July 19, convalescence being uninterrupted.

Remarks on Electricity in Medicine and Surgery.

By JOSEPH C. CLARK, M. D., Olean, N. Y.

IN THESE times of rapid development of new electrical apparatus and methods, a medical man not equipped with a good dry cell or direct current, and an up-to-date faradic battery must be considered decidedly unprepared to deal with many conditions of ill-health. The well-known power of these currents to relieve pain in nerves and to loosen the tendon attached by infiltrations to its sheath, and thus restore crippled function still holds good, and will continue to do so as long as these currents are known. Some become more ambitious and enter a field of electricity that is full of battle, unrest and wide diverging opinions as to its ability to do half that is claimed, and that is the field of the mysterious and seductive static electricity and its more mysterious production of *x*-ray.

A few years ago a 4 or 6 revolving plate static machine was considered all that one could wish. Then the manufacturers began to talk static breeze and the apparatus took on the formidable size of 16 to 24 revolving plates, and improvements in insulation, ball bearings and charges rapidly took place. A reaction has now set in, and an apparatus with 10 revolving plates will do all that is required with much less danger of unpleasant effects upon the patient.

In using the static electricity during the past eight years, I am very favorably impressed with its good effects in tertiary syphilis, such as prompt relief to nodes upon the skin, glandular enlargements and ulcers and the very rapid disappearance of lesions, in connection with specific treatment. A patient recently came under my care who had a sinus following an opera-

tion for appendicitis of eighteen months' duration, and who had been taking specific treatment for months. He has shown marked improvement under the use of the static breeze and *x*-ray exposures combined with specific treatment. I consider the static breeze and *x*-ray treatment as favorable to relieve syphilitic disease as alcohol is unfavorable to its cure.

The tonic effect of static electricity does not exceed that of the galvanic or faradic; the careful and thorough use of the galvanic and faradic constitutes one of the greatest tonics and stimulants that can be brought to bear upon the human system. It awakens torpid conductivity of every nerve thread in the body and its greatest benefits can be demonstrated in the aged in whom loss of superficial sensation can be proved, only to quickly return after a few treatments by the galvanic and faradic currents. The galvanic should be used never longer than fifteen minutes to begin with, for fear of reaction, such as chills and nervousness. But it is some trouble to disrobe, and the exposure often deters the medical man from using these currents. The static apparatus here comes in as a quick and convenient method of giving electricity and, as an enthusiastic patient once remarked, "It is good for whatever ails you."

It is as curative as any medicine known for rheumatism; besides, medical treatment can be employed with it. The static enthusiasts remind one of those mildly deranged and superior people called christian scientists: it's static or nothing.

I might furnish a long list of diseases favorably affected by static electricity, but will only say that as a means of watching a patient, and especially in many chronic diseases, there is no method known that gives one as ample opportunity for observation and benefit.

The *x*-ray will photograph the human skeleton, but I have known men to fail in securing a skiagraph, and one physician denied that it would produce a picture. That the *x*-ray will cure the superficial forms of lupus, scarcely admits of a doubt, yet this is denied daily by many eminent men. Shall we put them in the class with the man who failed to secure the skiagraph?

The skin specialist with his arsenic and methyls and other stomach disturbers, cannot, in my opinion, show the results obtained by *x*-ray treatment in a large number of skin troubles and, as already remarked, there is no reason why internal medication should not be used in connection with the *x*-ray, yet as a

matter of fact it is often unnecessary. The use of the *x*-ray in superficial epithelioma is fairly satisfactory. Some of the small and very chronic cases are quickly cured. The more acute the condition the surer the failure to relieve.

Carcinomatous conditions are relieved of pain and discharge lessens under its use. This is more marked where the process is very slow and chronic. The *x*-ray will not cure these cases, but the use of the *x*-ray after the operation upon enlarged glands and returning nodules seems fairly successful, and it is to be hoped the *x*-ray will be sufficient to render the extreme dissection under the pectoral muscles unnecessary.

The teaching of electro-therapeutics in our colleges, and its employment in our large hospitals will increase as the demand for more knowledge of this great aid to the practice of medicine and surgery becomes apparent.

119 Laurens Street.

CLINICAL REPORT.

Report of a Case of Labor with Double Uterus and Vagina.

By HENRY T. WILLIAMS, M. D., Rochester, N. Y.,
Surgeon to Rochester City Hospital and St. Mary's Hospital.

THIS patient, 26 years of age, consulted me first in June, 1896. She then had been married about eighteen months, and came to see me on account of a troublesome leucorrhea with smarting pain in urinating. Examination revealed some inflamed urethral caruncles and two distinct vaginæ, the left smaller than the right, and two distinct cervices uteri, into each of which a sound could be passed 2½ inches. The sounds could not be made to touch each other while in the uteri, showing two distinct cavities, practically two uteri, but only one ovary and tube could be felt on each side. Each vagina had a distinct hymen, the wall between the two vaginæ being about ¼ of an inch thick and extending up between the two cervices. No communication, whatever, existed between the two vaginæ. The cervices projected about ¾ of an inch into each vagina.

I advised operation for the removal of the vaginal septum, but this she would not consent to have done. She consulted me again in the latter part of December, 1896, saying she had

missed her period and feared she was pregnant. I examined her in January and found both cervices slightly softened and bluish in color and the uteri somewhat enlarged. She complained of morning sickness and other symptoms of pregnancy. I could not tell if she were pregnant in one or both cavities of uterus. I again urged upon her the necessity of an operation, fearing that if she went on to delivery with such a septum, it might result in a rent into the bladder, rectum or pelvic tissue.

She consented to the operation, and on January 30, I dissected out the partition between the two vaginæ, beginning at its upper portion. I removed in one piece the entire septum from between the cervices and out to the perineum, sewing the denuded surfaces together with one continuous suture of catgut, beginning about an inch below the meatus and ending at perineum, thus making one vagina. I then introduced a large-sized hard rubber vaginal dilator, which was left in for five days, the urine being drawn through a catheter every six hours during this time; the dilator was then removed and patient allowed to urinate naturally. The parts healed by first intention and pregnancy continued normally.

Labor began on the morning of October 3, 1902, and when I reached the house, about 1 o'clock in the afternoon, labor was well advanced, and I could feel but one os uteri which was three-quarters dilated. The labor was perfectly normal and was completed in one and a half hours after I reached the house. The child was a male and weighed 7½ pounds. There was but one placenta and that came away a few minutes after the birth of the child. She made an uneventful recovery. I examined her two months afterward and found but one cervix, which was somewhat larger than an ordinary cervix would be, and one os also quite large, and the sound showed that there was but one cavity to the uterus, the partition having been completely obliterated during the labor. The vagina and perineum were intact. She has been well since that time.

THE SALT PACK IN RHEUMATOID ARTHRITIS.— Jonathan Hutchinson, F. R. S. (*Polyclinic*, January, p. 45) knows no remedy so almost universally effectual in removing irritation and synovial effusion in rheumatoid arthritis as the salt pack. It consists of flannel soaked in a saturated solution of common salt, which is wrapped round the affected joint, covered with oiled silk and a bandage, and kept on the whole night. It should be applied every night until the cure is effected.

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine.

Section on Medicine, December 9, 1902.

Reported by N. L. BURNHAM, M. D., Secretary.

The regular meeting of the Medical Section of the Buffalo Academy of Medicine was held in the Academy rooms, Public Library Building, on Tuesday evening, December 9, 1902, the chairman, Dr. Albert E. Woehnert, presiding. The meeting was called to order at 8.50 p.m. The minutes of the previous meeting were read and approved.

The first paper of the evening, entitled,

PULSATIONS OF THE THORACIC WALL, WITH REPORT OF A CASE OF PULSATING HEMOTHORAX.

was read by Dr. Joseph Sailer, of Philadelphia.

Pulsations in the walls of the thorax may be divided into those forms due to excessive action of the heart or bloodvessels, either as a result of disease or nervous influence, and those forms due to some alteration in the pleural contents. Of the latter we can recognise the endo- and eso-pleural pulsations; the latter may be circumscribed, or a diffuse wave or a diffuse expansion. It has been noted in a variety of conditions, of which the most important are empyema of necessity, pyopneumothorax, simple empyema, serous effusion, abscess of the thoracic wall and hemothorax. The great majority of cases occur upon the left side and apparently the most important etiological factor is tension of the mediastinal tissues. This tension is favored by obliteration of the pericardial cavity, by pericardial adhesions, or by pericardial effusion.

In a case of hemothorax, due to rupture of an aneurism of the transverse and descending arches of the aorta, pulsation was observed over the situation of the aneurism, and, in addition, around the base of the chest from the sternum to the vertebral column. This pulsation was distinctly expansible in type. At the autopsy, obliteration of the pericardial cavity was found; the mediastinal tissues were tense and two rents were found in the wall of the aneurism. It is probable that in this case the tension of the mediastinum, the pulsation of the heart and the aneurism, and the pumping of blood through the opening in the

aneurism into the pleural cavity, all contributed to the production of pulsation.

Dr. Sailer also reported a case of

EVENTRATION OF THE DIAPHRAGM.

A case of epilepsy developed typhoid fever, and when transferred to the medical ward a tympanitic note was heard over the left side of the chest below the third rib. The heart was displaced to the right, and when the patient swallowed, gurgling was heard over the tympanitic area. The upper border of this tympanitic area moved on respiration. In diagnosticating the case there was considered: high position of the diaphragm, pneumothorax, cavity in the lung and diaphragmatic hernia. Careful consideration of the physical signs led to the preference being given to high position of the diaphragm. At the autopsy this was found to be the case, apparently due to an extreme degree of hypoplasia of the left lung, which was further deformed by being divided into four lobes. This condition is known as eventration of the diaphragm, a name given by Courveilhier in the early part of the 19th century. Since his original report, thirteen cases, not including the present one, have been reported, all characterised by hypoplasia of the left lung, dislocation of the heart to the right, and high position of the diaphragm.

In another series of cases in which hypoplasia of the left lung has existed, there has been dislocation of the heart to the left and backward and the diaphragm has not been markedly displaced. It seems more reasonable, in view of the fact that the primary condition is the same in both series, to group the two conditions together and speak of them as hypoplasias of the left lung with dextrocardia and high position of the diaphragm, or with dislocation of the heart backward and to the left.

Dr. Sailer exhibited some very excellent skiagraphic work of these two cases. The plates showed such minor detail as coils of intestine, area of congested lung, height of diaphragm, and the like.

DISCUSSION.

Dr. Rochester congratulated the essayist upon the very excellent clinical work done upon these cases and also the high grade of *x*-ray work which was being done at the Philadelphia Hospital. He had seen a case of pulsating chest in a patient suffering with empyema and a hypertrophied heart. The pulsation occurred in the axillary region on the left side. Autopsy revealed an adhesion between the pleural in the region of the

heart. This adhesion assisted pulsation. Dr. Rochester moved a vote of thanks to the reader of the papers.

The motion was seconded by Dr. Charles G. Stockton, who considered Dr. Sailer's classification a sensible one. Dr. Stockton had seen a case of pulsating hemothorax primarily with the pulsation soon disappearing. The autopsy revealed the left thorax filled with blood and a ruptured aorta.

Dr. Allen A. Jones referred to gastric stagnation as a symptom in diaphragmatic hernia. He requested Dr. Sailer to explain the cause of pulsating pneumothorax.

The paper was also discussed by Dr. Lyon. Dr. Sailer, in closing the discussion, said, among other things, that air in the thorax must be under higher tension than the external air to produce pulsating pneumothorax.

Dr. Charles S. Jones read a paper entitled, Nephritis in Infants. He reported four cases of nephritis in infants which he had studied in his practice and suggested frequent careful urinalysis in children.

The paper was discussed by Dr. Dewitt H. Sherman and Dr. Allen A. Jones.

Meeting adjourned at 11 p. m. Number of Fellows present, 40.

Section on Pathology, December 16, 1902.

Reported by JACOB S. OTTO, M. D., Secretary.

The regular monthly meeting of the Section of Pathology of the Buffalo Academy of Medicine, was held in the Academy rooms, Buffalo Library Building, December 16, 1902, the chairman, Dr. I. P. Lyon, presiding.

Dr. Charles Wardell Stiles, Ph. D., Zoologist of the United States Public Health and Marine Hospital Service, at Washington, D. C., gave an interesting and instructive talk on

THE PREVALENCE AND GEOGRAPHIC DISTRIBUTION OF HOOKWORM DISEASE (UNCINARIASIS) IN THE UNITED STATES,

making special reference to a new species of hookworm (Uncinaria Americana) which was named by him and reported in *American Medicine*, May 10, 1902, p. 777. Dr. Stiles is entitled to the credit of differentiating this species of hookworm, which is very prevalent in the Southern States and which is most important in that it leads to such severe pathological conditions. The following abstract of his remarks is presented:

Uncinaria Americana (new-world hookworm) is differentiated from *U. duodenalis* (old-world hookworm) and is seen to

approach *U. stenocephala* of dogs in some characters and *U. cerua* of sheep in others.

First establishing the occurrence of *U. Americana* in the three widely separated points, Texas, Virginia and Porto Rico, he obtained authorisation from Surgeon-General Wyman to make investigation within this triangular territory. He commenced his investigations in Virginia in the fall of this year (1902) and worked directly southward from Washington, visiting orphan asylums, schools, mines, plantations, cotton mills, and the like, from which abundant material was obtained, not, however, without difficulty in some places. It was soon found that the disease arose almost exclusively on sandy soil and in rural districts, practically never in towns, whereas malaria, with which it had been confounded, is found on clay soil. It was also found to be more prevalent among the whites than among the negroes.

To Dr. Stiles, credit is due for a full description of the symptoms of this disease, which in a marked case are well defined. A person suffering with a severe case of uncinariasis presents first the symptoms of a marked anemia. The lips are blanched, secondary pigmentation of the skin occurs, the skin becoming parchment-like and of a yellowish-brown hue. There is extreme emaciation, while the abdomen becomes protuberant (pot belly). A special symptom of the eye was noted, which has never been previously described, the pupils becoming markedly dilated when the patient's eyes are fixed on any object. After this symptom was discovered it was noted in every case of the disease whereas, by contrast, it was found in only two persons (sons of an inebriate) not affected with uncinariasis.

There are also present palpitation of the heart, shortness of breath, visible pulsation of the vessels of the neck and swelling of the feet and abdomen. These symptoms are so constant that the patients, when asked with what they are afflicted, frequently reply "heart disease and swollen feet." The pot belly is caused by ascites and tympanites, and sometimes hepatic and splenic enlargement. The disease in its extreme form generally causes a perversion of the appetite, of one form or another, and persons were observed to eat such things as mud, sand, clay, tobacco, salt, salt and lemons, rags, chips of wood, and even live mice. This feature of the disease has also been noted in animals. Eighteen per cent. of the seals of Alaska die from uncinariasis, and stones are found in the stomach post-mortem.

If the disease begins in childhood, at which period are shown the most marked symptoms, the growth, both mental and physical, is stunted, so that an adult may appear to be ten or twelve years of age. This feature has a direct and important bearing on the question of child-labor in the South, and Dr. Stiles took occasion to defend the Southern millowners who have been more or less severely criticised for the physical and mental condition of the children employed in the mills. The greater number of them come from the sandy farming areas and are found to have been suffering from uncinariasis before they entered the mills, and from conversation with the children thus employed it was learned that they were healthier in the mills than they were in their homes.

The clinical determination of a case of uncinariasis depends on the above symptomatology plus certain specific tests.

Test 1.—The detection of ova in the feces by means of the microscope. The adult parasites are not found, except after anthelmintic treatment.

Test 2.—In the absence of the microscopical test a small mass of feces may be placed on filter paper and after twenty minutes removed. In 80 per cent. of cases of this disease a marked reddish-brown stain is left on the paper, which is due to the presence of blood in the feces. The hemorrhage is caused by a piercing of the mucous membrane by the parasite.

The examination of the blood shows marked loss of red corpuscles and hemoglobin, a variable leucocytosis and a marked eosinophilia. As eosinophelia may occur with other intestinal parasites, it is merely suggestive in this disease.

Treatment.—Thymol is practically a specific, and should be given in large doses, 2 grammes at 8 o'clock a.m. and 10 o'clock a.m., followed at 12 o'clock noon by a brisk saline cathartic. It is usually necessary to repeat the medication at the end of a week. Thereafter, weekly examinations of the stools for two or three weeks should be made to determine the effectiveness of the treatment. Frequently a further course of treatment is found necessary. Care must be taken not to administer thymol in alcoholic solution or at the same time with alcohol, as toxicity and convulsions may result.

DISCUSSION.

Dr. Allen A. Jones inquired about the type of anemia that was associated with the disease.

Dr. A. L. Benedict wished to know how many slides were necessary to detect the parasite.

Dr. C. C. Frederick asked if infection came from water supply or by inhalation.

Dr. Julius Ullman asked if the hemorrhages were severe enough to account for the anemia.

Captain Riley, Assistant Surgeon U. S. Army, gave an interesting account of his experience with uncinariasis in the Philippines, where he had seen many cases among the natives and soldiers. He believed that *uncinaria Americana* causes a more severe infection than the European type, which latter is the species found in the Philippines. He has seen some cases in which the ovum was present without symptoms other than those of slight indigestion. Natives use the emulsion of turpentine in the treatment of the diseases. It is necessary to use caution in the administration of thymol, as the natives and soldiers drink vinol, an alcoholic beverage.

Dr. H. U. Williams asked if there was any other factor than hemorrhage in producing the anemia.

In closing the discussion Dr. Stiles stated that the anemia was of the pernicious type and the disease was often diagnosticated pernicious anemia. He considered the blood examination an indirect method of diagnosis, as an eosinophilia would merely suggest infection by an intestinal parasite and would direct one to an examination of the feces.

The anemia is produced in the following way: the parasite attaches itself to the intestinal wall and sucks blood for a time, then lets go and travels to another part of the intestine, leaving behind small bleeding points, causing the hemorrhage. This process leads to thickening of the intestine and a consequent interference with absorption of nutritive materials. Dr. Stiles believed there was also produced by the parasite a toxin which is a factor in causing the anemia and especially the eye symptoms. Uncinariasis is a filth-disease and the infection is directly from the dirt on the hands, not through inhalation.

One slide preparation usually suffices to reveal the eggs. The adult is rarely found, except after anthelmintic treatment, when many hundreds of the parasites may be found.

Dr. Lyon stated that the discovery announced tonight by Dr. Stiles before our Academy was of immense importance in its humanitarian aspect. It was no mere discovery of a new variety of parasite, but it meant the recognition for the first time in the United States of the existence of a widespread affection, afflicting untold thousands of our citizens, and condemning them to a life of more or less continued suffering. The recognition of the disease means its control and its ultimate stamping out. This discovery ranks in its importance to humanity with the two other great medical discoveries of recent years,—the discoveries of the relation of mosquitoes to malaria and to yellow fever.

A vote of thanks was moved, seconded and carried, expressing the appreciation of the section of Dr. Stiles's interesting and instructive address.

Members present, 46.

ABSTRACTS.

Creosote and Creosotal in Pneumonia.

Last March, Dr. I. L. Van Zandt, of Fort Worth, Texas, (*Medical Record*, October 11, 1902,) sent out a number of circulars to many medical journals and to a few individuals, asking the following questions of those who had used creosote or carbonate of creosote (creosotal) in the treatment of pneumonia: (1) Do you believe creosote ever aborts pneumonia? (2) Do you believe the majority of cases are mitigated by it? (3) Have you ever found cases which, having plenty of time, were entirely uninfluenced by it?

In response he had over seventy letters and cards and five verbal statements, a large proportion of which he tabulated. To the first question 37 physicians, reporting 762 cases, said "yes;" 15, reporting 187, said "no;" and 19, reporting 177, failed to answer. Therefore, of those reporting, a little over two-thirds admitted the abortive effects of creosote. To the second question, 57, reporting 1,022 cases, answered "yes;" 2, reporting 10 cases, said "no," and the remainder failed to answer. To the third, 23 said "yes;" 31, "no;" and 16 failed to answer.

Of 1,130 cases reported, 56 were fatal, 24 of them being accounted for as follows: 12 were complicated, 9 others were over the age of 67 (in some instances complicated), 3 were alcoholic (of which two were complicated); 1 was far advanced when treatment was begun, and 1 used "creosote products." The mortality in this series is a little over 5 per cent; and, as the recognised death-rate is 25 per cent., the author claims that the treatment saved 226 lives.

Van Zandt refers particularly to Prof. W. H. Thomson's report of cases treated with carbonate of creosote in the Roosevelt Hospital. The loss here was 1 in 13, or about 5.5 per cent. A condensed report for five years from this institution gives an average death-rate of 35.6 per cent.

These figures confirm the conclusions of his former article, that a large per cent. of pneumonia is cut short or aborted;

almost all the rest mitigated, and the remainder or a very small per cent. not affected by the remedy. He thinks the use of creosote or carbonate of creosote in the treatment of pulmonary affections is one of the greatest life-saving discoveries of the 19th century.

Coughs and Their Treatment.

Under the above title Drs. Alex. de Soto and C. W Crimpton, physicians to the Wayside Mission Hospital, Seattle, Wash., present some important observations upon this subject, which possess special importance in the winter season. Among other things they say: cough is a symptom, varying in intensity and character according to its cause, nor is the cause always situated within the respiratory organs themselves. It is essentially a reflex act depending upon an irritation of the respiratory center.

These sources of irritation may be subdivided as follows: dropping of mucus from the posterior nares in chronic catarrh; polypi, enlarged uvula or tonsils, defective closure of the glottis, irritations within the larynx from whatsoever cause, malignant or otherwise; bronchitis, pneumonia and pleurisy; gastric, when due to derangements of the stomach; cardiac disease, irritations of auditory canal and organic diseases within the abdominal cavity.

From the foregoing causes, it may be readily estimated that to arrive at the exact nature of the cause in any given case may not always be an easy matter. Nevertheless, we must relieve the patient, without risk of disturbing either digestive or circulatory systems. Any remedy which will attain this object in a goodly number of cases is of inestimable value to patient and physician.

Not until our attention was called to glyco-heroin (Smith) did we become acquainted with a remedy which we have used with almost unvarying success in coughs of every description, and in patients of all ages and conditions, without the slightest unfavorable effect.

The points which recommend this remedy may be briefly stated as follows: (1) palatability; (2) economy; (3 to 4 oz. being ample for a cure of the average case); (3) its immediate action, soothing the most trying cases; (4) its absolute freedom from unpleasant or unfavorable effects; (5) it is not only a palliative but a curative agent; (6) the hyoscyamus it contains reaches those trying cases of dry cough due to other causes than simple catarrhal irritation of the respiratory tract.

These observers declare that its action is almost specific and that it will give satisfaction in every case where results may be reasonably expected, and in many instances its beneficial effects go beyond the most sanguine expectations.

They report a number of cases in detail, treated in the hospital and in the out-patient department, from which the foregoing conclusions have been reached.

BUFFALO MEDICAL JOURNAL.

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EDITOR:

WILLIAM WARREN POTTER, M. D.

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Proceedings of the Charaka Club.[1]

THE Charaka Club, of New York, has after an existence of four years published a volume of its transactions and we were among the fortunate few to receive a copy. Fortunate because of this book the Charaka Club has printed and published for its members and friends only 300 copies.

The club is small and select. Its members are Drs. Pearce Bailey, John S. Billings, John Winters Brannan, Joseph Collins, Charles L. Dana, Arpad G. Gerster, Ward A. Holden, Frederick Peterson, B. Sachs and George F. Shrady. The only honorary member is Dr. William Osler. The object of the club is to cultivate the literary, artistic, and historical aspects of medicine. How well they have succeeded, alas! only a very few are privileged to know. The articles selected for publication are only eight.

The first article on Hindoo medicine is full of interest and instruction in the practice as taught by Charaka. According to Sachs he became the instructor of practitioners upon earth and was the author of the oldest work on the subject of Hindoo medicine.

There are many gems in this paper gathered from the sage. We must content ourselves with a small selection.

A good teacher is like rain falling upon the germinating seed and should possess the following qualifications. He should be kind and humble to everyone. He should always be increasing his knowledge of books, and should be neither angered by the improprieties of others, nor fatigued by their importunities. He should be kind and considerate to his pupils and be able to explain the most complicated statements in the simplest and most perspicuous language. Among the Hindoos, there is a

[1] Volume I. William Wood & Co.

great veneration for the principles of medicine as handed down from generation to generation.

The article, which is a long one, abounds in quotations showing the practice as applied to fevers, consumption, and directions for operation.

The contributions by Dr. Peterson are three short poems—Heredity, Environment, and Solitude. We will not attempt a description, but with his permission we hope to publish them in some future number of the JOURNAL, for we need not only more science but more—much more—sweetness and light in our lives.

Dr. Gerster contributes an entertaining review of the Hippocratic doctrine of the injuries of the cranium.

Doctor Dana's article on the Cult of Esculapius, his statues and his temple, includes a description and photographs of the antique statues by the Greeks and Romans of Esculapius. The picture of the sacred grove containing the temple, The Tholos, The Abator and the Temple of Artemis, at Epidaurus, is a revelation to the uninitiated of the extent of this ancient and most celebrated of all the structures in which the worship of Esculapius was carried on. It remained a place of worship longer than any other devoted to the god of medicine. To it the Romans sent for the sacred serpent when they, in 270 B. C., adopted Esculapius as one of their gods. It had the finest and largest statue of the god, a great record of cures and a theatre of unrivaled splendor.

From all over the world patients were sent for cure and as its therapeutical resource was almost entirely of the psychical kind, it is perhaps the best illustration of how long a system of suggestive therapeutics, backed by divine authority, can maintain itself against the scepticism and incurable ills of the world.

Dr. Collins contributes two articles, one on hypnotism, not as practised by him but as he is requested to practise it, and a second article on ethics.

The evil spoken of physicians is a charming literary excursion by Dr. Dana in classic fields, and is rich in merry jests of the ancients at our expense. Petrarch said, "The doctors say that life is short, but they appear able to abridge it." Nicocles, 400 B.C., said, "The physician is fortuntate, for the sun exploits his successes and he conceals his errors."

"The maid Calypso often cried
Because she was immortal.
The goose! She surely never tried
The doctor and his bottle."

Addison furnished this on consultations:

> A single doctor like a sculler plies,
> The patient lingers and by inches dies;
> But two physicians, like a pair of oars,
> Waft him with swiftness to the Stygian shores.

La Bruyère is kinder when he says: "As long as a man is sick and wants to live, he will employ physicians and abuse them."

What a delightful time the Charakans had at their meetings, and how wise it is for physicians to wander into other fields than the purely practical, is the conclusion reached by reading this book.

Dr. W. D. Greene, Commissioner of Health of Buffalo, in his annual report for 1902, calls attention to the necessity of establishing a filtering plant.

He says that while the city water supply can be considered fairly good, it is not wholly free from danger because of the fact that the lake and river are polluted to some extent by the cities that drain into the lake above Buffalo. In part the report says:

So long as the refuse of upper lake cities is emptied into the lake, carried along, and deposited as a sediment, and reagitated and dispersed by continuous storms, the water carried to our intake will exert its influence upon the public health.

The department has no hesitation in stating that the possibility of typhoid fever from lake water must necessarily be present during certain periods of every year; that its cause is one beyond present control, and, therefore, it is pertinent to consider what are the practical means of overcoming the conditions and their results as stated.

The solution of the question will be found in the establishment of filter beds constructed on sound hygienic principles and located after careful engineering inquiry, and so long as the condition exists, it becomes the duty of the department to call attention to it with the suggestion as to its correction.

Dr. Adolf Lorenz, who sailed for England, December 31, 1902, has reached his home at Vienna in safety, and has given his countrymen interesting accounts of his American visit. He likes this country and its people and does not hesitate to say so. He is enthusiastic over our physicians and in regard to the great charities that we have established.

Prior to his departure he was officially received at the City Hall, at New York, by the Mayor and corporation, when he

was presented with engrossed resolutions and the freedom of the city. At a farewell luncheon served at the Hardware Club, tendered by Aldermen Walkley, Sullivan and Stewart, the committee on the resolutions, a well expressed address was delivered by Mr. Walkley.

Dr. Lorenz replied in a well chosen speech which deserves to be read. He said:

When I first put my foot on this soil three months ago, I had a sense of oppression because of the greatness of this place. A feeling of clumsiness came upon me. I had no idea then of the magnificent leave-taking you have prepared for me in this hour. Nor could I have any idea of the reception that would meet me everywhere in this country, from the Atlantic to the Pacific coast. In olden times the freedom of cities used to be given to princes and victorious warriors. Today you are conferring this freedom of the city upon a poor and humble physician. This makes me think of the great changes that have taken place in the last few centuries. Not only princes are honored today, but every man whose work tends to benefit mankind is, in your eyes, worthy of this honor. I take it gratefully from your hands. Need I assure you that this document will be the most precious reward of my efforts?

This token of your esteem is a proof that in America wealth and position are not esteemed higher than work done for the relief of suffering humanity. This token of your esteem is a further proof that this city is not only unique in its wealth, but also unique in its charities. I rejoice in this great honor all the more because I am far from regarding it as a personal one; but I am proud to belong to a profession to which this honor is due. In honoring me you have honored the profession. I thank you from the bottom of my heart, and I assure you that I leave your glorious country with great regret, and with the highest admiration for America and American people.

Dr. Lorenz's remarks were loudly cheered, and for about ten minutes before leaving the City Hall a large crowd surrounded him, shook him by the hand and bade him God-speed.

PERSONAL.

Dr. William C. Krauss, of Buffalo, announces his removal from 371 to 479 Delaware Avenue. Hours: 8-11; 1-4 and by appointment. Telephone, Tupper 96.

Dr. Frederick H. Millener, of Buffalo, who has been ill for some weeks, has recovered his health and resumed his profes-

sional practice, which is limited to diseases of the ear, nose and throat.

Dr. D. J. Constantine, of Buffalo, who for several years past has been an inspector in the department of health, has resigned that office and will hereafter devote himself entirely to the practice of medicine which now requires his whole time.

Dr. Adolph H. Urban, of Buffalo, has been appointed clinical instructor of diseases of nose, throat and ear at the Buffalo University, Medical Department, also otologist to the German Hospital Dispensary. His office and residence are at 523 Franklin Street. Hours: 9 to 12 a.m., 5 to 6 p.m. and by appointment. Telephone Tupper, 1436.

Dr. Willis G. Gregory, of Buffalo, was elected first vice-president of the New York State Board of Pharmacy, at its recent annual meeting, held at Albany. Dr. Gregory has been a member of the board for some years.

Dr. Eva V. Mead, of Buffalo, has established her office at 426 Dearborn Street. Hours: 4 to 5 and 7 to 8 p.m. Telephone, North 115.

Dr. Beatrice Todd Hagen, U. of B., 1900, has removed from 407 Fargo Avenue, to The Netherland, 267 Franklin Street. Hours: 9-10 a.m.; 2-4 p.m.

Dr. R. B. Granger, of New York, for many years managing editor of the *New York Medical Journal*, announces to his medical friends and acquaintances that he has become associated with the medical publishing house of W. B. Saunders & Company, of Philadelphia, as its representative in New York City. A fine suite of offices has been opened in the Fuller Building, at the junction of Fifth Avenue, Twenty-third Street, and Broadway, where he will be pleased to receive his friends. Dr. Granger's acquaintance with the American profession is very large and all will be interested in learning of his success in his new relations, though he will be missed from the position which he has honorably filled for so many years.

OBITUARY.

Dr. Charles A. Osborne, U. of B. '61, of Owosso, Mich., died at his home January 2, 1903, aged 70 years. Dr. Osborne served as surgeon of the Eleventh Michigan Cavalry regiment in the civil war and became a physician of prominence at Owosso. He died of paralysis after a long illness.

Dr. William J. Deane, U. of B. '95, of Buffalo, died at Kingston, Ont., from tuberculosis, December 31, 1902, aged 30 years.

Dr. Joseph R. Laine, of San Francisco, U. of B. '76, died at the German Hospital in the city of his home, December 15, 1902, aged 56 years. He had been ill for a long time, suffering from cardiac disease. Dr. Laine settled first in Peoria, Ill., then removed to Nebraska, and finally to California, locating first at Sacramento and afterward at San Francisco. During his residence in California he served for eight years as a member of the State Board of Health, a portion of the time being secretary. He was one of the founders of the College of Physicians and Surgeons in San Francisco, of which he was president during several years. He was also Assistant Surgeon-General of the California National Guard, holding the rank of lieutenant-colonel.

Dr. Bushrod W. James, of Philadelphia, a prominent homeopathic practitioner and author, died at his residence, January 7, 1903, aged 67 years.

Dr. Frederick J. Bancroft, of Denver, Col., died at San Diego, Cal., January 16, 1903, of disease of the heart, aged 68 years. He graduated in medicine at the University of Buffalo in 1861. He served as a surgeon during the civil war, after which he located at Denver in 1866, and became one of the most prominent physicians in that state.

Dr. Bancroft served as president of a number of medical organisations and was the first president of the Colorado State Board of Health.

Dr. Ephraim W. Gantt, of Lockport, died in that city January 4, 1903, aged 71 years. He was born in Lockport, graduated

in medicine at Columbia Medical College and practised for a few years in Illinois. Afterward he returned to Lockport and for many years was editor of the *Lockport Union*. He also served as a member of the Board of Education for several years.

SOCIETY MEETINGS.

THE Medical Society of the County of Erie held its 82d annual meeting, January 13, 1903, at which the following-named officers were elected: President, Ernest Wende, Buffalo; vice-president, J. D. Macpherson, Akron; secretary, F. C. Gram, Buffalo; treasurer, Edward Clark, Buffalo; librarian, W. C. Callinan, Buffalo; censors, Irving W. Potter, John B. Coakley, Henry R. Hopkins, Henry Lapp and F. E. Fronczak.

THE Wyoming County Medical Association held its semiannual meeting at Perry, January 6, 1903, with the following program: Syphilis of the nervous system, Floyd S. Crego, Buffalo; Eczema, Grover W. Wende, Buffalo; Two centuries of smallpox, the one before and the one after the discovery of vaccination, Z. J. Lusk, Warsaw; Injuries to the shoulder joint, E. B. Belknap, Wyoming.

THE Buffalo Academy of Medicine held meetings during the months of December and January, 1902 and 1903, as follows:

Section on Ophthalmology, Otology and Laryngology.—Tuesday evening, December 30. Program: Some remarks on nasal and pharyngeal reflex neuroses, W. S. Renner. On the present status of the vaccine question, as shown by inoculation experiments upon the cornea, H. R. Gaylord.

Section on Surgery.—Tuesday evening, January 6. Program: Some of the causes leading to and producing suppuration, F. W. McGuire. Operative treatment of clubfoot, Bernard Bartow.

Section on Medicine.—Tuesday evening, January 13. Program: Infantile eclampsia, A. J. Colton. Injuries and infections of newly-born children, Irving M. Snow.

Section on Pathology.—Tuesday evening, January 20. Program: Universal diseases seen in Buffalo, imported from our tropical possessions, with demonstrations by patients from Fort Porter, John J. Riley, U.S.A., Surgeon-major at Fort Porter.

COLLEGE AND HOSPITAL NOTES.

The Alumni Association of the medical department, University of Buffalo, will hold its mid-winter session at the University building, Friday evening, February 23, 1903. This promises to be one of the most enjoyable and instructive occasions which have been held since the winter meetings were instituted. The new quarters of the physiological department will be formally opened at that time, and the speaker of the evening will be one of the foremost physiologists in this country. A new story has been added to the west wing of the college building for the accommodation of the physiological and pharmacological departments, with a new and complete equipment for laboratory instruction and research in these fields of work. The opportunities for teaching in these topics is thus placed on a par with other great schools in this country. The name of the speaker of the evening will be announced as soon as arrangements are completed.

The Buffalo Hospital of the Sisters of Charity, at the annual meeting held January 14, elected the following-named officers of the hospital staff, to serve for the ensuing year: Edward J. Meyer, president; Charles S. Jewett, vice-president; Alfred H. Diehl, secretary and treasurer.

Immediately after election the officers were installed. Following the installation the members adjourned to one of the wards on the second floor of the hospital building, where a banquet was held.

The Emergency Hospital staff has been enlarged by the appointment of the following-named physicians: E. J. Meyer and E. M. Dooley, in the surgical service; L. G. Hanley, in the gynecological service; J. J. Mooney, laryngological service; M. Keiser, ear diseases; B. H. Daggett, genitourinary service. Otherwise the staff remains as before.

The Lexington Heights Hospital was opened in 1890, being one of the earlier private hospitals in this city. It was then known as the Wilcox Private Hospital, with Dr. DeWitt G. Wilcox as proprietor and owner, who organised it for the purpose of providing a place for his surgical patients. It was organised as a stock company in 1893. Later it was enlarged and called

the Lexington Heights Hospital. It was conducted as a stock company until 1897, when Dr. Wilcox leased the property from the company and used it for his own patients. Dr. Wilcox has now purchased the entire plant, buildings and lot, with all its equipment, and is again the sole owner and proprietor. It will still be known as the Lexington Heights Hospital. It has been newly furnished throughout and equipped with practical appliances for the treatment of gynecological and surgical diseases, and a complete *x*-ray outfit has been added. A regularly incorporated training school is attached to the hospital, which has graduated nurses for the past ten years.

THE Washington Post-Graduate Medical School began its first term January 12, 1903, under the presidency of General George M. Sternberg, M. D., LL.D., Surgeon-General U. S. Army, retired. A full corp of teachers has been organised, and instruction will be given on preventive medicine, comparative medicine, animal parasites, serum-therapy, biochemistry, sanitary chemistry, bacteriology, pathology, internal medicine, applied anatomy, surgery, Röntgen-ray work, military and naval medicine and surgery, orthopedic surgery, gynecology, obstetrics, mental and nervous diseases, tropical diseases, diseases of children, diseases of the stomach, diseases of the eye, of the nose, throat and ear, venereal and genitourinary diseases, and diseases of the skin. The hospitals of Washington will be open for clinical teaching to matriculants, and the attractions of the National capital are such as to justify expectations of a large attendance.

THE Olean General Hospital was opened November 12, 1902, with accommodations for 16 patients. It is established on what was known as the Dean property, which was purchased less than a year ago for $6,000. The refitting cost between $3,000 and $4,000, which has made it a modern institution, equipped with preparatory and operating rooms, wards, and rooms for private patients. A number of the citizens of Olean contributed a fund of $6,000 to guarantee the salary of the matron for 10 years and the hospital opened free of debt. The physicians in active practice, about fifteen in number, fitted up the operating rooms, and the wards and other rooms were furnished by different church and fraternal societies; the employees of the Pennsylvania Railroad Company also contributed to that end. The

citizens, and especially the physicians, of Olean, are to be congratulated upon the establishment of the hospital on a sound basis.

The New York School of Clinical Medicine has established a special department of neurology, of which Dr. T. D. Crothers, of Hartford, Conn., has been elected professor, for the study of the neuroses and psychoses of alcoholism and of drug habits. Dr. Crothers is announced to deliver immediately a course of clinical lectures on inebriety from alcohol, opium, chloral, cocaine and other narcotics. These lectures appear to be timely, for the diseases dependent upon or associated with the abuse of alcohol, opium, chloral, cocaine, and other narcotic drugs are steadily increasing in the United States, and the demand for special treatment in institutions and retreats is becoming more pressing every year.

BOOK REVIEWS.

How to Succeed in the Practice of Medicine. By Joseph McDowell Mathews, M. D., LL. D., President Kentucky State Board of Health; Professor of Surgery, Hospital Medical College, Louisville; Author of "Mathews on Diseases of the Rectum." Octavo, pp. 234. Illustrated. Louisville: John P. Morton & Company. 1902. [Price, $2.00.]

The distinguished author of this useful book has been a teacher and practitioner for more than twenty-five years, hence is in a position to know of what kind of advice students and recent graduates stand in greatest need. Those who know Professor Mathews best would expect him to write just such a book as this which, from cover to cover, abounds in good nature—human nature we might say with great propriety—and is a heart to heart talk between teacher and pupil. Moreover, it contains so much of value to every physician and it is put into such a readable shape that it is not likely to reach alone the office table of the junior, but to be found in the hands of every physician who would be entertained and instructed in the general success of the members of his profession. Besides, it is a book for the doctor's family and this will add to its effectiveness as well as to its popularity.

In the amphitheater and in the lecture room, Professor Mathews is noted for his clearness of description, simplicity of rhetoric, and forcefulness of diction. He is also a public speaker of wide-spread fame, in which capacity he makes potent use of the same qualifications that have given him such strength as a teacher. From all this it might be expected that a book from his pen on such a subject as that under consideration would be entertaining.

How to succeed in the practice of medicine! Who among the juniors would not like to know the secret? How many of the middle-aged would not wish to turn backward to the open sesame? And who of the seniors in medicine would not wish they could have secured entrance to the charmed portals at the outset?

But there is no assured road to success in any occupation, much less is there one to professional success in medicine. In order to succeed one must be prepared in the most careful way. Unpreparedness is the bane of the period. To be well prepared for a difficult work, is to rob its approach of half its perplexities. But preparation means time and this in turn, means money; hence many, too many, enter the ranks of medicine with scant preparation for the trials that await them.

This book does not tell one how to succeed in spite of preparation, but it points out the road to success after proper equipment for the journey. It gives the plain rules that experience teaches to be a safe guide, and it imparts that kind of knowledge which can be gained only by experience and attentive observation. It also tells how to avoid errors too often committed, which is a matter of supreme importance, especially in the beginning of the professional journey.

In the course of its pages it takes the young practitioner through the long and trying ordeal of beginning and waiting, up to success and fame, and finally, to the close of his career, when in the evening of life he enjoys the fruits of his labor. The story is entertaining from beginning to end and bespeaks the work of a master. It is in reality one of the best recent books on a subject not strictly scientific, but of closely allied importance to the technical studies of the physician.

A Treatise on Diseases of the Eye, Nose, Throat, and Ear. For Students and Practitioners. By various authors. Edited by William Campbell Posey, A. B., M D., Professor of Ophthalmology in the Philadelphia Polyclinic; Surgeon to the Wills Eye Hospital; Ophthalmic Surgeon to the Howard and Epileptic Hospitals. And Jonathan Wright, M. D., Attending Laryngologist to Kings County Hospital, Brooklyn. Royal 8vo, pp. 1252. Illustrated with 650 engravings and 35 plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. 1902. [Cloth, $7.00; leather, $8 00.]

In the preface of this book the editors state that it is especially designed for the general practitioner and the student. That being true, it may be regretted that it is not a better book.

One of the first things to strike the reader's eye, is a typographical error on page 48, where a cut of the physiological excavation of the optic nerve is called the "physiological examination," and one of the last things is an error in spelling in the index where Pray's astigmatic letters are said to be Progs. Such faults are particularly deplorable in a work which has for its prime object, the instruction of the uninitiated; both on account

of their being misleading and because when discovered, they are apt to breed distrust of the whole text.

Excepting those of the fundus oculi, the plates are all poorly colored and, consequently not as good as the other illustrations which are less pretentious. The eye, nose and throat have a fair share of space devoted to them; but the ear is positively slighted.

Drs. Weeks, Duane and Wood have contributed excellent articles and to say that they are fully up to the standards of these well known writers, is the only comment necessary.

The crowning feature of the whole volume is The Eye in Its Relations to General Diseases, written by Dr. Clark. Besides being both instructive and attractive, it is a very convenient and valuable source of reference, that will be greatly appreciated by busy men who heretofore have been obliged to search through a number of different chapters in order to find what this writer has condensed into one. It is a most commendable idea.

As a whole, the book is not pleasing; it is far from perfect and gives one the impression that it was published hurriedly. It will bear a deal of pruning and should be much better in its second edition. L. B.

A System of Physiological Therapeutics. A Practical Exposition of the methods, other than Drug-giving, useful in the prevention of Disease and in the Treatment of the Sick. Edited by Solomon Solis Cohen, A.M., M.D., Senior Assistant Professor of Clinical Medicine in Jefferson Medical College; Physician to the Jefferson Medical College Hospital, and to the Philadelphia, Jewish and Rush Hospitals. In 11 volumes. Volume V. Prophylaxis, Personal Hygiene, Civic Hygiene, Care of the Sick. By Joseph McFarland, M. D., Professor of Pathology, Medico-Chirurgical College, Philadelphia; Henry Leffman, M. D., Professor of Chemistry in the Woman's Medical College, Philadelphia; Albert Abrams, A. M , M. D., formerly Professor of Pathology, Cooper Medical College, San Francisco; and W. Wayne Babcock, M. D., Lecturer on Pathology and Bacteriology, Medico-Chirurgical College, Philadelphia. Octavo, pp. 856. Illustrated Philadelphia: P. Blakiston's Son & Co. 1903. [Price for the set, $27.50 net.]

This volume deals with the natural history of medicine and gives important facts as far as at present understood concerning the origin, dissemination, and prevention of disease. It is in reality an introduction to the science of medicine, but it is also much more, since its special province is to set forth in plain terms, instructions as to the preservation of health and to teach how to prevent disease. These in the present day constitute the highest province of medicine and the most exalted functions of the physician.

In the first part the origin and prevention of diseases are discussed by McFarland and Babcock; in the second part civic hygiene is dealt with by Henry Leffman; and in the third part domestic and personal hygiene, nursing and care of the sick-room are delineated by Albert Abrams. These parts are subdivided into sections and these again into chapters, so easy reference may be had to any topic or branch of the general subject. It is doubtful if so much information of equal value can

be obtained elsewhere for the price. Moreover, it is just the kind of information with which every physician should become familiar. The entire series is of great moment, but this book is indispensable for every medical practitioner.

A Textbook of Diseases of the Eye. A Handbook of Ophthalmic Practice for Students and Practitioners. By G. E. de Schweinitz, A. M., M. D., Professor of Ophthalmology in the University of Pennsylvania. Fourth edition, revised, enlarged and entirely reset. Octavo volume of 773 pages, with 280 text-illustrations and 6 chromo-lithographic plates. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $5.00 net; sheep or half-morocco, $6.00 net.]

The fourth edition of this standard work on the eye shows a complete revision; over one hundred pages have been added to the text, together with nearly fifty additional illustrations. Metastatic gonorrheal conjunctivitis; the so-called holes in the macula; grill-like keratitis; divergence paralysis, convergence paralysis and other new chapters will prove of interest and greatly enhance the value of the work. The newer silver salts are mentioned in connection with the diseases in which they are indicated. The only disappointment will be the treatment of granular ophthalmia, for de Schweinitz still advocates the use of sulphate of copper and strong bichloride, or nitrate of silver solutions. R. H. S.

Practical Midwifery. A Manual of Obstetrics for Students and Physicians By Edward Reynolds, M. D., formerly Instructor in Obstetrics, and Franklin S. Newell, M. D., Assistant in Obstetrics and Gynecology in Harvard University Medical School, Boston. In one 8vo volume of 531 pages, with 253 engravings and 3 full-page colored plates. Philadelphia and New York: Lea Brothers & Co. 1902. [Cloth, $3.75 net.]

The authors of this work admit the congested condition of medical literature, but justify another book by themselves because an earlier volume received favor and, further, because the publishers think there is demand for a book constructed on the lines drawn for this manual.

Admitting all this to be true we still feel that both authors and publishers should be extremely circumspect in offering new books to an already overtaxed profession. The literature of obstetrics has been made rich of late by the publication of comprehensive volumes with a wealth of illustration most remarkable. Nevertheless, we see in this book some advantages, or perhaps excellent features, that commend it to favorable reception. It is a compact book, concise in its statements, betrays experience in teaching, and represents the advanced scientific thought of the present day. In support of the latter statement, or indeed, of all in the foregoing paragraph, we cite what the authors say under the head of abortion, miscarriage, and premature labor. There is a constant misapplication of these terms and it would serve to clear the way to complete understanding and intelligence on these topics, if teachers would

adopt in concert the classification here made—namely, abortions are those terminations of pregnancy that occur during the first three months, or until the placenta becomes formed; miscarriages, from the end of the third until the end of the seventh month, or from the formation of the placenta until the viability of the fetus; and premature labor after the fetus has become viable.

In the section upon abnormal labor the authors are strong in the presentation of their views and we commend this part of the book as worthy of special study by junior practitioners. There has been throughout the work a judicious selection of illustrations, and though not profuse they are clear in demonstrating the text and are well executed for the most part.

It is a treatise likely to commend itself to the thoughtful student and ambitious obstetrician, into whose hands it will surely fall.

A Reference Handbook of the Medical Sciences. Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By various writers. A new edition, completely revised and rewritten. Edited by Albert H. Buck, M. D., New York City. Volume V. Illustrated by chromolithographs and 576 half-tone and wood engravings. Nine volumes, imperial 8vo. New York: William Wood & Co. 1902. [Price, muslin, $6.00 per volume; leather, $7.00 per volume; half morocco, $8.00 per vol.]

There are one hundred and forty-eight contributors to this volume, of whom four reside in Buffalo. Their names are Drs. Montgomery A. Crockett, Herbert M. Hill, Roswell Park and Grover W. Wende. Their work compares favorably with that of other contributors to the book, which in many respects is a notable one, maintaining the high standard set by the preceding volumes. While we cannot take up each article in detail, we may point out some of the excellencies which await the subscriber to this series as he examines the fifth volume.

In the first place there is an extensive presentation of the subject of inflammation, which is always one of interest and has never been exhausted. Then follows a symposium on insanity contributed by some of the prominent alienists of this country, which is well illustrated and makes a treatise on the subject of 125 double column quarto pages. Kidney and liver diseases are similarly treated, as well as affections of the larynx and lungs. The diseases of the eye are scattered through the entire series of eight volumes, this one containing its full share. The group of articles relating to the upper-air tract, when associated with the symposium on diseases of the ear in volume four, and the article on diseases of the nasal cavity to appear in volume six, constitute one of the most complete expositions on diseases of the ear, nose and throat that has been printed in English.

Besides these groups there are isolated articles of great importance, written by prominent teachers and authors, as well as laboratory workers, that add to the value of the volume and thus increases the scientific worth of the series. These are only a few of the excellent features of volume five, that appear as

one turns its pages rather cursorily, but a critical examination discloses so much treasure that we are unable to catalogue it without trying the patience of the reader.

It is sufficient to say, as a concluding thought, that this volume is full of valuable information for general practitioner and specialist,—a work well arranged, beautifully illustrated and splendidly printed.

A MANUAL OF SURGERY. For Students and Practitioners. By WILLIAM ROSE, M. B., B. S., Lond., F. R. C. S., Professor of Clinical Surgery in King's College, London, and Senior Surgeon to King's College Hospital, and ALBERT CARLESS, M. S., Lond., F. R. C. S., Surgeon to King's College Hospital and Teacher of Operative Surgery in King's College, London; Examiner in Surgery to Glasgow University. Fifth edition. Octavo, pp. 1227. Illustrated. New York: William Wood & Co. 1902. [Price, $5.00 net.]

A new edition of this popular manual will be welcomed by a great number of practitioners as well as students, though it was originally designed especially to meet the needs of the latter, the large textbook being too much to master during undergraduate career. Be this as it may, there is place for the book which is attested by the fact that four editions already have been exhausted, the last one having been issued only a year before the fifth or present edition.

The authors have made some changes of value in this issue, though we question whether the time honored traditions relating to inflammation should be cast aside to give first place to bacteriology and the principles of antiseptic and aseptic surgery. However much we may value the work of the laboratory as a clinical aid, and we would not belittle it, the fact, nevertheless, remains that the antemortem pathology learned at the bedside is the most practical and the laboratory contributions to this end are invaluable. One must master the classics of inflammation before the laboratory aids can be appreciated or applied.

This work is a compact, scientific, and intelligent exposition of modern surgery and commends itself to everyone interested in the study or practice of that branch of medicine.

BACTERIOLOGICAL TECHNIQUE. A Laboratory Guide for the Medical, Dental, and Technical Student. By J. W. H. EYRE, M. D., F. R. S., Edin., Bacteriologist to Guy's Hospital, and Lecturer on Bacteriology at the Medical and Dental Schools, London. Octavo of 375 pages, with 170 illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $2.50 net.]

Dr. Eyre started out to make a book which would be of some use to the student who had a smattering of bacteriology and who wanted to know more, especially of that portion of the science which relates to technique and recognition of all the essential little details of bacteriology, and he has admirably succeeded. And one of the reasons for his success is his free use of illustrations. He is a believer in good pictures and those which are employed are admirable in every sense; they are artistic and eloquently useful. They have other needs than the filling up

of space. A studied effort has been made to teach students how to fit up and adapt apparatus for daily use and so carefully has this been carried out that there can be little excuse for failure in technique.

The contents of this really valuable book shows how complete it all is. Nothing which could possibly be of the slightest use in the way of suggestion has been overlooked, nothing is taken for granted. Glassware is first taken up and described fully and the student is even taught how to clean and keep it clean. Sterilisation agents and methods follow, and then comes a most lucid and understandable chapter on the microscope, with microscopic examinations, included in which are descriptions of apparatus, reagents and their preparation, and the staining methods. This gives an idea of the thoroughness of the book and the great care given to detail.

Included in the work are these general chapter-headings: Methods of determining bacteria in tissue; methods of cultivation; isolation and identification; experimental inoculation of animals and post-mortem examinations; the study of the pathogenic bacteria, and bacteriologic analyses, all of which goes to make up a very complete volume. There are 170 illustrations and everyone has a distinct value in itself for each has a mission to fulfill and it achieves the object for which it was used.

N. W. W.

MANUAL OF GYNECOLOGY. By HENRY T. BYFORD, M D., Professor of Gynecology and Clinical Gynecology in the College of Physicians and Surgeons, Chicago; Professor of Gynecology in the Post-Graduate Medical School and in the Chicago Clinical School. Third revised edition. Duodecimo, pp. 620. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $3.00 net.]

We have made favorable comment of this book heretofore in these columns, and it is a genuine pleasure to take up the subject again with this new edition as a text. The original intention of the author was to supply the student with a work that would meet the requirements of undergraduate study better than the more pretentious textbooks; also to furnish the practitioner who made no pretentions to specialism, a guide that would enable him to decide when he has reached his limitations and when the gynecologist was needed. It must be a satisfaction to Professor Byford to have succeeded so admirably in both directions.

There has been a rearrangement of the parts in this edition, so that now there is consecutive progress from anatomy, through surgery to functional and nervous diseases, making a homogeneous treatise that appeals to the natural sense of order that should pervade the medical mind.

The marginal notes are serviceable devices that every student will appreciate. The illustrations have been chosen with care and are artistic delineations of the text, adding to the usefulness and mechanical beauty of the book. In all the domain of gyne-

cological literature there is no minor treatise that surpasses it for scientific accuracy, and concise description.

PROGRESSIVE MEDICINE. Volume IV, December, 1902. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, cloth, 412 pages, 54 illustrations. Philadelphia and New York: Lea Brothers & Co. [Per volume, $2.50, by express prepaid; per annum, in four cloth-bound volumes, $10.00.]

This volume closes the series for 1902, which in its four books has been replete with valuable information not found elsewhere in such accessible form. This book deals with diseases of the digestive tract and allied organs—the liver, pancreas and peritoneum; anesthetics, fractures, dislocations, amputations, surgery of the extremities, and orthopedics; genitourinary diseases; diseases of the kidneys; physiology; hygiene, and closes with a practical therapeutic referendum. The contributors of these articles in the order named are Max Einhorn, Joseph C. Bloodgood, William T. Belfield, John Rose Bradford, Albert P. Brubaker, Charles Harrington, and E. Q. Thornton.

The surgical article is of special interest, particularly those portions dealing with anesthetics, fractures and operative technique. Where there is such a wealth of excellent material, it is, however, difficult to determine which part is of most value, there being in these instances quite as much pertaining to general medicine and hygiene that deserves careful examination as the surgical topics. The therapeutic referendum is the best compilation for the year that we have seen.

A HANDBOOK OF MATERIA MEDICA, PHARMACY AND THERAPEUTICS. Including the Physiological Action of Drugs, the Special Therapeutics of Disease, Official and Practical Pharmacy, and minute directions for prescription writing. By SAMUEL O. L. POTTER, A. M., M. D., M. R. C. P., Lond., formerly Professor of the Principles and Practice of Medicine in the Cooper Medical College of San Francisco. Ninth edition, revised and enlarged. Octavo, pp. 951. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $5.00 net.]

This is hardly a handbook for it is an octavo of 951 pages. It is as complete a study of drugs as one can wish. No new remedy of proved value is neglected. The book is arranged in three parts. Part I. is an alphabetical list of drugs. Each drug is described, physiological action and therapeutic indications being given. The animal extracts mentioned are the thyroid, bone-marrow, nuclein, orchitic, cerebrin, adrenalin, splenic, lymphatic, pancreatic, parotid, ovarian, uterine and mammary gland. In regard to these Potter says, "Most of them are yet on trial and the limits of their utility in medicine are by no means defined."

Part II. is devoted to pharmaceutical preparations and directions for prescription writing.

Part III. is devoted to special therapeutics. The leading

authorities are freely quoted and many valuable suggestions are given for almost all the ills that human flesh is heir to.

We believe the work will always be a favorite one with physicians as it is written with care and is fully up to date.

J. W. P.

Saunders's Question Compends. Essentials of Diseases of the Ear. By E. B. Gleason, S. B., M. D., Clinical Professor of Otology, Medico-Chirurgical College, Philadelphia; Surgeon in charge of the Nose, Throat and Ear Department of the Northern Dispensary, Philadelphia. Third edition, thoroughly revised. 16mo volume of 214 pages, with 114 illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $1.00 net.]

These little books have always been admirable and this one is no exception. Their standard of excellence was established years ago and is so well known that further comment upon it is unnecessary; the only difference between the new and the old being the additions required to bring the subjects down to date. In that respect Dr. Gleason has left nothing undone. L. B.

Kirke's Handbook of Physiology. Revised by William H. Rockwell, Jr., M. D., and Charles L. Dana, A. M., M. D., Professor of Diseases of the Nervous System, Cornell University Medical College, New York; Physician to Bellevue Hospital. Octavo, pp. 865. Seventeenth American edition. With upwards of 500 illustrations, many in colors. New York: William Wood & Co. 1902. [Price, $3.00 net.]

This sterling handbook, which has appeared in repeatedly revised editions for so many years, has contributed to the knowledge of physiology in no small degree. Its arrangement is such as to make it a favorite with the undergraduate, while the practitioner prizes it as a work of reference. The present edition has undergone such necessary revision as will serve to keep it well in the front rank, physiological chemistry having received special attention. Again, that portion dealing with the blood has received merited consideration, while illustrations have been changed in some instances to suit the demands of progress.

It is a physiological handbook that has stood the test of time and is to be commended for its scientific usefulness, as well as for its freshened appearance.

The Medical Directory of New York, New Jersey and Connecticut. Published by the New York State Medical Association, 64 Madison Avenue, New York. Volume IV. 1902–1903.

This useful directory is again presented in an attractive form. It contains 13,364 names, 10,606, of which belong to the State of New York; 1,655 to New Jersey, and 1,103 to Connecticut. The use of tinted paper to designate the different sections of the book is a good plan because it facilitates reference. The difficulties in making a complete directory are many, and physicians themselves are to blame for defects in these important books of reference. This one appears to be as nearly perfect as it is possible to make such a work.

A Pocket Textbook of Materia Medica, Therapeutics, Prescription Writing, Medical Latin and Medical Pharmacy. By William Schleif, Ph. G., M. D , Instructor in Pharmacy in the University of Pennsylvania. New (2d) edition, revised and enlarged. In one 12mo volume of 382 pages. Lea's Series of Pocket Textbooks. Edited by Bern B. Gallaudet, M. D. 1902. [Cloth, $1.75 net; limp leather, $2 25 net.]

Materia medica and its allied topics furnish material for voluminous textbooks and subjects for studious attention. It is surprising how much of such a very large branch of medical science has been put into this condensed form, and that, too, without doing violence to the general purpose of the main subject or its associated topics. It is an excellent book for the student from which to refresh his thought, and for the practitioner as a ready reference handbook.

This edition, though so soon called for, has been completely overhauled and the revision furnishes new text, as well as a revamping of the old, so that the book represents the immediate present in its teaching. Among the changes may be mentioned an enlarged presentation of medical Latin and prescription-writing, and a new section entitled an annotated therapeutic index of new remedies.

A Guide to the Practical Examination of Urine. For the use of Students and Physicians. By James Tyson, M. D., Professor of Medicine in the University of Pennsylvania, and Physician to the Hospital of the University. Tenth edition, revised and corrected. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $1.50]

This is the tenth edition of the best work on uranalysis which has ever been published in manual form. Dr. Tyson has revised and corrected the work and added many points of value to the uranalyst in his daily work. As it stands now, it is quite difficult to see how it can possibly be improved upon by any further revision, yet we may expect another in the future, for Dr. Tyson keeps this work abreast the latest developments in the branch of which he is master. The popularity of the book is attested by the demand which has necessitated this new edition. It is freely and intelligently illustrated. The general practitioner who makes his own examinations cannot err if he follows Tyson. N. W. W.

The Practical Medical Series of Year Books. Comprising ten volumes on the year's Progress in Medicine and Surgery. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume VIII. Pediatrics and Orthopedic Surgery. Edited by W. S. Christopher, M. D., John Ridlon, A. M., M. D., Samuel J. Walker, A. B., M. D., 1902. Chicago: The Year Book Publishers. [Price, $1.25; entire series, $7.50.]

If all the books of this series are as excellent as this one the Year Book Publishers are to be congratulated in having prepared so desirable a work. The literature of pediatrics for the year is here classified under appropriate headings and abstracts made of the leading articles. The volume is of convenient size

for handling and the collection of all the literature pertaining to a subject in one volume gives the system a decided advantage over the cumbrous one-volume year book. M. J. F.

BOOKS RECEIVED.

Book on the Physician Himself, and Things that Concern His Reputation and Success. By D. W. Cathell, M. D. The Twentieth Century Edition. Eleventh Edition, revised and enlarged by the author and his son, William T. Cathell, A. M., M. D. Pp. 411, royal octavo. Philadelphia: F. A. Davis Company. 1903. [Cloth, $2.50 net, delivered]

Surgical Anatomy and Operative Surgery. For Students and Practitioners. By John J McGrath, M. D., Professor of Surgical Anatomy and Operative Surgery at the New York Post-Graduate Medical School; Visiting Surgeon to the Harlem Hospital, and Assistant Visiting Surgeon to the Columbus Hospital, New York. Illustrated with 227 illustrations, including colors and half-tones. Pages xiv 359. Royal Octavo. Philadelphia: F. A. Davis Company. 1903. [Extra cloth, $4.00 net; sheep, or half-Russia, $5.00 net, delivered.]

Culbreth's Materia Medica and Pharmacology. Third edition. A Manual of Materia Medica and Pharmacology. Comprising all Organic and Inorganic Drugs, which are and have been official in the United States Pharmacopeia, together with important Allied Species and Useful Synthetics. By David M. R. Culbreth, M. D., Professor of Botany, Materia Medica, and Pharmacognosy in the Maryland College of Pharmacy, Professor of Materia Medica and Pharmacognosy in the University of Maryland Medical and Dental Schools, Baltimore. Third edition enlarged and thoroughly revised. In one octavo volume of 905 pages, with 473 illustrations. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $4.75 net.]

Therapeutics of Dry Hot Air. By Clarence Edward Skinner, M. D., LL. D., New Haven, Conn., Professor of Thermotherapy in the New York School of Physical Therapeutics; Editor of the Department of Thermotherapy in the Journal of Advanced Therapeutics; Physician in charge of the Newhope Hot Air Sanitarium, New Haven Conn. Octavo, pp. 200. Illustrated. New York: A. L. Chatterton & Co. 1903. [Price, $2.00.]

Lea's Series of Pocket Textbooks. A Pocket Textbook of Anatomy. By William H. Rockwell, Jr., M. D., Assistant Demonstrator of Anatomy, College of Physicians, Columbia University, New York. In one 12mo volume of 600 pages, with 70 illustrations. Edited by Bern B. Gallaudet, M. D. Philadelphia and New York: Lea Brothers & Co. 1903 [Price, cloth, $2.25 net; limp leather, $2.75 net.]

Atlas and Epitome of Diseases of the Mouth, Pharynx and Nose. By Dr. L. Grunwald, of Munich. From the second revised and enlarged German edition. Edited, with additions, by James E. Newcomb, M. D., Instructor in Laryngology, Cornell University Medical School; Attending Laryngologist to the Roosevelt Hospital, Out-Patient Department. With 102 illustrations on 42 colored lithographic plates, 41 text-cuts and 219 pages of text. Philadelphia and London: W. B. Saunders & Co. 1903. [Cloth, $3.00 net.]

Atlas and Epitome of Human Histology and Microscopic Anatomy. By Privatdocent Dr. J Sobotta, of Wurzburg. Edited, with additions, by G Carl Huber, M. D, Junior Professor of Anatomy and Histology, and Director of the Histological Laboratory, University of Michigan, Ann Arbor. With 214 colored figures on 80 plates, 68 text-illustrations, and 248 pages of text. Philadelphia and London: W. B. Saunders & Co. 1903. [Cloth, $4.50 net.]

Biographic Clinics. The Origin of the Ill Health of DeQuincey, Carlyle, Darwin, Huxley and Browning. By George M. Gould, M. D., Editor of American Medicine; Author of "An Illustrated Dictionary of Medicine." Duodecimo, pp. 223. Philadelphia: P. Blakiston's Son & Co. 1903. [Price, $1.00.]

The Practical Medicine Series of Year Books. Comprising ten volumes on the year's progress in medicine and surgery. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume III. The Eye, Ear, Nose and Throat. Edited by Casey A. Wood, C. M., M. D., Albert H. Andrews, M. D., T. Melville Hardie, A. M., M. D. Chicago: The Year Book Publishers. 1902. [Price, $1.50; entire series, $7.50.]

The Johns Hopkins Hospital Reports. Volume X. Nos. 6, 7, 8, 9. Baltimore: The Johns Hopkins Press. 1902.

The Practical Medicine Series of Year Books. Comprising ten volumes on the year's progress in medicine and surgery. Issued monthly under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume II. General Surgery. Edited by John B. Murphy, M. D., Professor of Surgery, Northwestern University Medical School Chicago: The Year Book Publishers. 1902. [Price, $2.00; entire series, $7.50.]

Transactions of the Twenty-Fourth Annual Meeting of the American Laryngological Association, held at Boston, Mass , May 26, 27 and 28, 1902. James E. Newcomb, M. D., Secretary. New York: Rooney & Otten Printing Co. 1902.

Transactions of the American Surgical Association. Twentieth annual meeting, held at Albany, June 3 5, 1902. Richard H Harte, M. D., Recorder of the Association. Philadelphia: William J. Dornan, Printer. 1902.

Report of the Commissioner of Education for the Year 1900-1901. Volume I. Washington: Government Printing Office. 1902.

LITERARY NOTES.

THE TRIBUNE REVIEW.—*The Tribune Review* is quoted with respect by medical journals, and the accuracy of its editorial statements on scientific matters is attested by so high an authority as Lord Kelvin; while Prof. W. T. Spillman, the discoverer of Mendel's law, says that "the reason *The Tribune* is quoted so widely, and especially on scientific subjects, is that it is invariably so accurate."

The Review gathers and sifts every week the world's history, and serves it up with lucid comment. This publication, for the subscription price of $1 a year, places at the reader's service the trained abilities of the corps of correspondents (in this and foreign countries), editorial writers, literary, musical, art and dramatic critics, who coöperate in the making of a great metropolitan daily paper, which would cost you $10 a year if you had it delivered to you every morning.

The Review is an educational paper in the best sense. Not only are its general features such as to make it an admirable adjunct in the formation of character and opinion, but it contains special features of interest to parents and teachers. For example, a series of articles, entitled, "Careers for Young

Americans" is now running in its pages, including the following papers: Railroading, by George H. Daniels, general passenger agent of the New York Central Railroad; Journalism, by St. Clair McKelway, editor of *The Brooklyn Eagle*; The stage, by A. M. Palmer; Architecture, by Thomas Hastings, of Carrère & Hastings; Engineering, by a prominent engineer; Medicine, by Dr. D. B. St. John Roosa, president of the Post-Graduate Medical School and Hospital, New York City.

La Revue Médicale du Canada devotes practically its entire number, dated December 10, 1902, to a commemoration of the 25th Anniversary of Laval University. In this special number *La Revue* gives a history of the university with photographic reproductions of the university buildings and hospitals, together with biographical sketches of the faculty and pictures of each member. It is a creditable exhibition of journalistic enterprise upon which our contemporary deserves congratulations.

THE *Journal of Cutaneous Diseases including Syphilis* is the modified title of the former Journal of Cutaneous and Genitourinary Diseases. It is under the editorial direction of a group of dermatologists residing in New York, Boston, Chicago and Philadelphia. It will therefore in the future be a strictly dermatological journal. It is handsomely printed and this first new number contains much valuable material.

THE *California State Journal of Medicine* is the organ of the Medical Society of the State of California, and made its appearance in November, 1902. It is published by the society in the place of a yearly volume of transactions.

THE *Trained Nurse and Hospital Review* for January, 1903, contains the text of a bill proposed to be introduced in the legislature during the present session in relation to licensing nurses. It deserves great scrutiny by all interested.

THE *Dallas Medical Journal*, published at Dallas, Texas, is a new candidate for professional favor that appeared in November, 1902. It is edited by Dr. Alfred Roulet and its initial number presents an excellent appearance.

Medicine, edited by Dr. Harold N. Moyer, of Chicago, has taken on a new form and will be published hereafter as a double column quarto, enlarged, and with a new dress. We confess to a predilection for the former shape of this excellent magazine, but we congratulate the distinguished editor upon the splendid success of *Medicine*.

THE *Bulletin*, a quarterly medical review, which has been published since 1892 by the American Medical Temperance Association, has been consolidated with the *Journal of Inebriety*. The later journal, which first appeared in 1876, under the editorial care of Dr. T. D. Crothers, of Hartford, Ct., was the first and is still the only medical periodical in the world devoted exclusively to the scientific study of the neuroses and psychoses of spirit and drug diseases.

THE *Medical Library Journal*, a quarterly devoted to medical libraries, history, bibliography and biography, made its initial appearance during January. It is published in Brooklyn, and is issued under the joint editorship of John S. Brownne and Albert T. Huntington. It contains a large amount of very interesting reading matter, is well illustrated, and makes a handsome appearance.

THE *Index Medicus* is a monthly classified record of the current medical literature of the world. Its publication has been revived and the second series is published by the Carnegie Institution, Washington, D. C. The editors are Drs. Robert Fletcher and Fielding H. Garrison. It publishes no advertisements and does not exchange with other journals. The subscription price (to be paid in advance) is $5.00 a year in the United States and Canada; in foreign countries 25 shillings or marks, 30 francs or lire. All communications relating to subscriptions must be addressed: Carnegie Institution, Washington, D.C. Letters relating to the editorial department should be addressed: Editors *Index Medicus*, Washington, D.C.

THE *Archives of Pediatrics* for January, 1903, has been issued. It is the first of the twentieth yearly volume of a journal which is the oldest in the English language devoted exclusively to the diseases of infants and children. During the coming months its

high reputation will be fully maintained, and its readers may count upon receiving contributions from the leading pediatrists of the world.

Messrs. W. B. Saunders & Company announce to the profession that they have established a branch of their business in New York. They have secured a suite of rooms in the Fuller Building, located at Fifth Avenue, Broadway and 23d Street. Dr. Reed B. Granger, for many years managing editor of the *New York Medical Journal*, together with a representative who is thoroughly familiar with the methods of the Philadelphia house, will be connected with this new branch; and Mr. W. B. Saunders personally will divide his time between New York and Philadelphia.

Physicians visiting New York are cordially invited to make these conveniently appointed offices their headquarters, where they can receive and answer their correspondence, obtain an interesting panoramic view of the city from a most favorable point, and where they will always be courteously welcomed.

The Books of a Year.—The *Medical Book News*, in the four numbers thus far issued, has provided an interesting illustration of the really very small figure for which all the new books on medicine and allied sciences published in 1902 might be purchased, were anyone desirous of so doing.

In the July (initial) number, 79 American and English titles appeared under the heading "Recent Publications." These titles represent 31,232 reading pages and 5,473 illustrations. The net price for this wealth of medical literature is only $287.15.

The September number listed 84 titles, these standing for 33,209 pages of printed text and 9,731 illustrations. The net purchase price for these 84 works is $239.41.

An increase in titles is noted in the November number, which announces 105 new publications. A total of 41,229 reading pages, carrying 7,202 illustrations, is here offered for $305.20.

The present issue, too, runs rather heavy in point of number of recent publications listed, 95 being found. These listed volumes contribute 41,183 pages of reading matter and 6,436 illustrations, at a net purchase price of $313.95.

A grand totaling, therefore, shows that the 363 new works published within the last twelve months, representing 146,853 pages of reading with 28,842 illustrations, could be purchased for the comparatively small sum of $1,145.71, this being an average of but $3.15 per volume.

MISCELLANY.

The Tenth Annual Report of the Children's Hospital, of Buffalo, for the year ending October, 1902, has been issued. During this period 170 children have been cared for, of which number 93 have been cured and 49 relieved. An incubator ward has been established and two infant incubators have been installed after the pattern in use at the Pan-American Exposition, costing about $1,500. This splendid charity deserves well of our citizens.

Examinations of candidates for appointment in the medical corps of the U. S. Army will be resumed by the Army Medical Board in Washington, D. C., April 20, 1903. Classes will be invited to appear April 20, and each Monday thereafter as long as is necessary. Full information as to method of application, nature and scope of examination, and the like, will be furnished by the Surgeon-General at Washington upon request of those interested. Applicants from civil life are restricted in age to twenty-nine years, and hospital training or professional experience in private practice is expected of all candidates. There are at present thirty-five vacancies to be filled.

Civil Service Examination—Erie County Service.—An open competitive examination for the Erie County service will be held in Buffalo, February 7, 1903, for the positions mentioned below. Intending competitors must fill out application blanks and file them in the office of the commission on or before noon of February 5. Candidates having applications on file will be given ample notice of the time and place of examination. No one will be admitted to the examination without the official notice (form E-8) from the Chief Examiner of the Commission.

Competitors must be at least twenty-one years of age, and must be citizens and residents of Erie County. The time allowed for the examination is six hours.

Positions and requirements: physician, Erie County Penitentiary, $600; physician, Erie County Jail, $300. Candidates must be licensed medical practitioners of the State of New York. Subjects of examination and relative weights: general medicine and surgery, 6; questions on the organisation and administration of medical department, 2; experience, 2. For application blank, address Chief Examiner, State Civil Service Commission, Albany, N.Y.

ITEMS.

The Lambert Pharmacal Company, of St. Louis, has sent us a very handsome calendar stand, mounted in strong leather, and equipped with calendar cards for the year. We offer our thanks for the courtesy.

The Enno Sander Prize, of the Association of Military Surgeons of the United States for 1903, will be awarded to the author of the best essay on The differential diagnosis of typhoid fever in its earliest stages.

The board of award will consist of Dr. Austin Flint, of New York; Colonel Calvin DeWitt of the Army; Prof. Victor C. Vaughan, of Ann Arbor. Full information concerning the contest may be obtained from Major James Evelyn Pilcher, Carlisle, Pa., the secretary of the association.

The Documents in the Case is the title of a somewhat graphic description of the case of Mrs. S—— and notices the marked and rapid improvement in her condition as evidenced by the differential blood counts. The Palisade Manufacturing Company, of Yonkers, may be applied to for information in regard to the treatment which proved so distinctly successful in this marked case of chloro-anemia. This unique legal looking folder is worth examining.

Fracture of the Olecranon is the subject of Chart No. 10, issued by Battle & Co., of St. Louis. It is clearly set forth and treatment in detail accompanies the drawing.

Polk's Medical Register of the United States and Canada is being revised for its eighth edition and will soon be put through the press. Every physician is interested in making this directory as accurate as possible and should respond promptly to requests from the publishers.

BUFFALO MEDICAL JOURNAL.

VOL. XLII.—LVIII. MARCH, 1903. No. 8.

ORIGINAL COMMUNICATIONS.

Henry de Mondeville, the Man and His Writings.

With Translation of Several Chapters of his Works.

BY CHARLES GREENE CUMSTON, M. D., Boston, Mass.

(*Continued from February Number.*)

CHAPTER III.

RESOLUTIVA AND THE MANNER OF USING THEM.

Like the previous chapter this one is also divided into three divisions:

The first part has two subdivisions:

(1) Avicenna in Canon II., Div. I., Chapter 4, and Serapio in his Aggregetiones, sermon 4, de divisione duarum medicinarum, both say: The resolutiva distribute humors, convert them into vapor and gradually draw them from the depths of the tissues, until by their continued application all humor has been withdrawn. They must be dry, distributing, opening and not drying; hot, in order that they may draw the distributed humor from the member: distributive, in order that they may distribute the substance of the humor which we seek to dissolve; opening in order that they may open the pores of the skin sufficiently and can dilate them so that the dissolved materia may make its exit; nonciccative, so that they do not absorb the moisture by their dispelling and drying qualities, which softens the entire materia which is to be resorbed. In the chapters of Avicenna and Serapio, it will be seen what constitutes a warming, distributive, opening and drying medicine.

(2) When treating an abscess we must, shall and can, if proceeding correctly, apply resolutiva in two cases: firstly, when we do not dare to repercuss, as in this case, we are confronted with one of the nineteen cases mentioned in another rule of the

chapter on generalities; secondly, when we try to repercuss and are unsuccessful, because the body is full and cannot absorb anything or because the materia does not obey. Here, also, resolutiva are contraindicated (provided, of course, that the abscess is produced by some internal cause), unless before a proper purge has been administered. This we have already demonstrated in the chapter dealing with the general treatment of abscess. The resolutiva agree with the maturativa in two points, and they deviate from them in one point, at least for the time being. Firstly, they resemble each other in that they relieve pain; and, secondly, in that they sometimes can be substituted one for the other; for example, when a resolutivum is applied to such a large quantity of materia that the pores are inadequate for the exit of the matter, then the resolutivum has a maturing effect at the same time. If, on the other hand, a maturing remedy is applied to a subtle quantity of matter, it dissolves it. Thus, it frequently happens that one and the same remedy, like the plaster of common juice, sometimes matures, sometimes loosens up the process. The difference between these remedies consists in that the resolutiva will produce an opening in hot materia, and the maturativa with their hot quality will block up. From what has been said two facts are obtained: (1) the resolutivum is capable of dissolving the subtlety of any materia, and densifies its residuum; (2) it is capable of dissolving the subtlety in the abscess and of maturing the dense part.

II. The resolutiva are either simple or compound.

The simple ones are as follows: camomile, which alone is of any value, since it does not attract more than it dissolves, honey clover, paritaria, the white or forest malva, fumatory, anetum, cabbage, the nettle, enula, borrage, buglossa, sambucus, ebulus, valerian, the seeds of cabbage, anetum, nettle, malva, parsley, apium, fennel, furfur hordei, fabæ, (fabarum?), cicer (?), orobus, (bran of barley, beans, peas, forest pea), thick bread crumbs, the fat of the goose, duck, fowl and pig, all kinds of marrow, mastix, incense, myrrhs, gum ammoniac, separium, galbanum, apoponax, and all kinds of fine gum, lapdanum, ysopus humida, turpentine, wax, the sediment of wax, butter and similar substances.

The composite resolutiva made from the above and similar drugs are oils, unguentums, plasters, poultices, pastes and ferments.

There are six oils: (1) a mixture of equal parts of anetum oil and the common ripe oil; (2) oil of camomile (from the blossoms), with common ripe oil; (3) oil of costos root, composed as follows: rp. costi unc., 1; pepper, pyrethri, euphorbii ana unc., 1-3; castor oil unc., 1, must be pounded together, passed through a sieve and dissolved in ½ pound of either lily or spicanard oil: it dissolves the cold humor and tensifies the nerves; (4) oil of the large camomile: rp. freshly dried camomile blossoms, buckthorn, linseed ana unc., 2, are placed in a glass jar containing 20 ounces of ripe oil. The oil may be allowed to stand in the sun or near a fire, in a well, or in a pot placed under the earth; it dissolves, warms, and relieves cold pain; (5) oil of lily, compounded as follows: rp. oil unc., 2; lily blossoms, without the lower saffron yellow colored parts, No. 30, cassia, radix costi, mastix, balm of Mecca, saffron, ana unc., 1; cloves, cinnamon, ana unc., ½, are all pounded together and placed in a glass jar in a shady place, excepting the lilies which are put separately in a little sack and which is hung into the mixture and then removed after a month, so that they shall not spoil and thus spoil all the oil. When warmed this oil warms, stops the cold pain, especially of the kidneys and uterus, and has no irritating effect; (6) oil of mastix: rp. moderately ripe olive oil unc., 3; mastix drachm, 6; to be boiled in a very large receptacle until the mastix is dissolved. This remedy has a marked dissolving effect and is excellent in cases of abscess in the neighborhood of the stomach, liver or spleen, relieves the pain and prevents fits, especially arising from the cold materia.

Ointments can be made from any one of the above mentioned oils by mixing them with the aforesaid powders and with wax, observing the quantities alluded to. We will here give five of them: (1) rp. oil of camomile unc., 3; wax unc., ½; buck's horn in powder, linseed ana unc., ½; are boiled and passed through a sieve; this dissolves and matures without attraction; (2) rp. oil of lilies unc., 3; wax unc., ½; seed of malva ana unc., ½, are mixed—dissolves like the preceding formula and matures hot materiæ; (3) rp. bdellium, sagapegum ana unc., ½; turpentine unc., 2, dissolve in vinegar until a saturated solution is obtained, then mix with turpentine, after a solution is obtained add two ounces of oil of lilies and pass through a sieve—absorbs cold abscesses; (4) rp. oil of camomile or anetum, drachms 6; wax, drachms 2; fat of the duck and fowl ana, drachms 2; seed of anetum and camomile flowers ana,

drachms 2,—the same process as above. (5) This is neither an ointment, properly speaking, nor a plaster, but is between the two and is termed moist ysop. Rp. fat wool, such as is found between the ribs and mammæ of sheep, over this rain water in desired amount is poured, so that it completely covers the wool and is allowed to stand twenty-four hours. It is then boiled over a moderate fire, cooled and passed through a sieve, then it is again boiled over a moderate fire in a metal vessel, being stirred with a wooden spoon until it becomes thick. This absorbs and softens like an ointment and can be used like an oil for making resolutive salves, plasters and any kind of resolutive preparations.

We have three resolutive plasters: (1) the diachylon plaster of Rhazes: rp. ripe oil unc., 5; litharge finely powdered unc., 1; buck's horn and linseed ana unc., 2; marshmallow unc., 1. Same preparation as given before. But if it is to be employed for dissolving scrofula, 1 ounce of dried powdered violet root should be added; but it will not dissolve scrofulous cysts and similar things; carbuncles are matured with the addition of the violet root; (2) lead plaster, according to Mesue: rp. pounded and sifted litharge unc., 12; oil of camomile, oil of anetum, and oil of violet root ana unc., 8; mucilage of marshmallow, powdered buck's horn, linseed, dried greasy figs, stoned grapes, juice of the violet root and squill, moist ysop, fish glue ana unc., 12; turpentine unc., 3; white resin, yellow wax ana unc., 2. These are boiled until a consistency between ointment and plaster is obtained. This ointment dissolves cold materia and softens a hard one; (3) common lead plaster, as described in the Antidotarius of Nicolaus: rp. old oil unc., 4; spumæ argenti unc., 36; malva and marshmallow root, buck's horn, linseed ana unc., 12, until a mucilaginous decoction is obtained, put one ounce on plaster. Regarding the manner of compounding this, we have already spoken of it in the introduction to this Antidotarium. The plaster is used for boils and for dissolution of small hot abscesses, when it is indicated to dissolve the matter. In the other case it digests, draws out, cleanses, regenerates, heals and has a good effect in curing from the beginning. In large hot abscesses its effect is favorable if in spite of the opening (incision?) they do not become healthy, and where the apostematic dyscrasia still remains. It is also indicated in cold abscess; it must therefore be removed twice daily and dried by means of wiping; after being dried it is freshened up by friction

with the thumb and then the ointment is replaced. It has a similar efficaciousness in pains and chronic swellings of the joints, and in pains of the intestine; dissolved in oil of mastix and placed on cut nerves, which are contracted by plethora; it is also applied to wounds of bad blooded patients.

We have four poultices: (1) rp. camomile flowers, seed of anetum unc., 2; powdered buck's horn, linseed and barley seed ana unc., 8; oil of camomile and anetum ana unc., 1, are to be boiled in a sufficient quantity of water and then pounded together and applied after repercussion and discharges. It absorbs abscesses and hot humors, and prepares hot abscesses for maturing; (2) rp. forest malva, cabbage leaves, camomile flowers ana, part 1, or one handful of each are boiled with the water and pounded in boiled water, and then add anetum or cabbage seed ana, part 1, powdered sulphur, parts 2; (3) rp. fennel, anis seed, anetum seed ana unc., 2; lupine, powdered buck's horn and linseed ana unc., 3; oil of lilies unc., 1, to be boiled in water, then pounded and afterwards add a little oil or vinegar; (4) our poultice or plaster of malva seed, as already described in Chapter II., Doctrine 2, Tract 2, in the seventh section of said chapter, which treats of the prevention and treatment of hot abscess, in the fifth introductory Notabel, in which we have also discussed its numerous well-confirmed excellent properties.

Paste poultices which the older surgeons used as resolutiva of hot wounds appear to me rather more relieving remedies in cases which call for suppuration (and the ancients liked these especially), are made of four parts of water to which is added a sufficient quantity of flour. After this is mixed, one part oil is added and then the whole is boiled to the consistency of a soft paste and applied lukewarm.

Fomentations are made from the decoctions of the above simple remedies. They must always be applied immediately before the application of the above mentioned compound local remedies.

III. Explanations, of which there are four: (1) if simple medicines are boiled for resolution, one part of the hot decoction is to be laid aside and therewith poultice the affected part until it begins to redden and swell, then the proper local remedies are at once applied; (2) if during the process of resolution the subtle (matter) absorbs itself from materia and if the residuum hardens, then maturing remedies are combined with the loosen-

ing ones, and they are alternatively applied until the desired condition is obtained. Maturing remedies, as much as is necessary, are considered later (3) if in the process of resolution all is not loosened, what one proposes to have loosened, and if the materia on the contrary, appears to be thick and gluey, therewith appearing to proceed towards maturing, then the maturing should be favored by local remedies which we have yet to consider, because the surgeon must always imitate nature, which later will always correctly operate; (4) the local resolutiva, maturativa, and mundificativa must not be of hard consistency, so that they will not injure the affected parts by their harshness, and will not, owing to the violence of the pain, attract the humors from some other part.

As these two chapters are taken from de Mondeville's treatise on drugs used in the treatment of wounds and abscesses, I think it will not be without interest to consider somewhat at length the rules he has laid down for the treatment of the latter process, which was called in those days an apostasis and simply means an accumulation of pus. The physicians of antiquity and the middles ages did not include in this conception an accumulation of pus as such, but, as is evident from the etymology, it means in a wider sense the conception of extension, an increase in height, that is, rising above the level from the surface of the body. A swelling, which under certain conditions, especially resulting from an external or internal inflammatory process, they called apostema.

The ancient writers assumed that the "*vix medicatrix natura*" endeavors to provide an outlet for the so-called "*materia peccans*" contained within the body and by this means endeavored to eliminate it. The formation of pus was in their way of thinking a matter of secondary consideration only, while, on the other hand, the therapeutical measures employed by them show that they were not convinced of the absolute necessity of the formation of pus.

Various repelling remedies, the so-called repercussiva, to which I have already alluded in the translation above given, were employed by the older surgeons for the purpose of preventing the formation of pus.

The works of Hippocrates refer in innumerable places to the words apostasis and apostema, usually in the sense in which at the present time the word apostate is used in its primary sense, that is, as a transition or a termination of one disease into

another. "Οἱ δὲ διαφεύγοντες φθάνουσι μετ' ἀποστήματος" qui vero effugiunt aut cum abscessu aut . . . effugiunt. (Those who recover in certain severe epidemic diseases, or from severe fevers, are cured by the formation of an apostema.) Thus, for example, it is stated in the twelfth chapter of the well known treatise on the manner of living in acute diseases, by the immortal father of medicine.

In the expression εἰς ἄρθρα ἀφίστασθαι, which literally means "to throw itself on the articulations," is to be found in the works of Hippocrates, the original meaning I take it is as a critical phenomenon in general, and this meaning was attributed to the word as is most plainly shown if the text is carefully read. Each termination of a disease, no matter whether δι' ἐκκρισιν (by elimination), or κατ' ἀπόθεσιν (by deposit of sediment), is called apostasis, as has been pointed out by Galen in his well known commentary to the sixth book on epidemics by Hippocrates. In another part of his commentaries on the epidemics of Hippocrates, Galen confirms that the physician of Cos designated the transitions, the so-called metastases, as "ἀποστάσεις". According to him they could arise either by the veins, arteries, the abdomen, in the skin, bones, the medulla, or to other "ἐκρυάς," that is to say, outlets, to the mouth, ears, nose and genital organs including the uterus.

Galen derives the word apostema directly from "ἀφίστημι" in his two books on Therapeutics which were dedicated to Glaukon, and explains the designation particularly: "ὅτι ἀλλήλων ἀφίστασθαι τὰ πρότερον ἀλλήλων ψαύοντα," because by the formation of the apostema that which formerly touched had now become separated.

In the works of Paulus, of Aegina, the renowned physician of the Byzantinian period, whose principal work attained such a large reputation, especially for surgery, the word apostasis is strictly confined to the process of suppuration. At the commencement of the 65th chapter of the 3rd book at which abscess of the vulva is discussed, the following passage occurs: "τῆς φλεγμονῆς εἰς ἀπόστασιν μεταβαλλομένης, etc., that is to say, when inflammation transforms into suppuration, the symptoms described increase in intensity while irregular elevations of the temperature accompanied with chills, set in.[1]

It is not to be a matter of surprise that in the later authors

1. For these explanations I am indebted to the monograph of Dr. Max Neuhaus, Berlin, 1897.

of the middle ages the expressions apostema and abscessus are used merely in the wider meaning of "exitura," meaning simply the termination of an affection with a tumor-like formation on the surface of the body. This is especially evident in the writings of Avicenna, who as is well known has supplied us with a clue for the understanding of the medieval medical literature. One of the passages in the famous Canon is as follows: "Eminentiæ enim sunt apostemata parua, sicut apostemata sunt eminentiæ magnæ. Et in apostemate enim omnia ægritudinum genera reperiuntur. In eo namque reperitur ægritudo malitiæ complexionis . . . . Et invenitur in ipso ægritudo communis, quæ est continuitatis solutio. Nullum enim accidit apostema nisi procul dubio continuitas soluatur; propterea, quod effunduntur materiae superfluæ ad membrum aposteatum et inter partes penetrant ipsius, et separationem inter unas faciunt et alias, etc." So speaks Avicenna, and how important the doctrine of abscess formation and the treatment of abscess in general was to the medieval surgeon, is most plainly evident from the fact that Guy de Chauliac in his Chirurgia magna places this chapter on abscess immediately after his treatise of anatomy. The following is a free translation into English of what de Mondeville has written on abscess, and in what I have here given the reader will be able to glean an insight into the conception that the medieval physicians had formed of abscess formation, and especially on the general principles for their treatment. Taking it all together, de Mondeville has given us a résumé of the teachings of his predecessors commencing with Avicenna and the representatives of School of Salerno, and this section of de Mondeville's treatise is an excellent basis for the formation of a historical appreciation of the work, because later surgeons as, for example, de Chauliac, make no additions or innovations on this subject, and we here insert the English version of his teachings.

Chapter II. Doctrine II. Treatise III.

On the ordinary treatment of abscess, in which will not be discussed the special forms of abscess, or the materia from which they originate, excepting when quoting examples.

We have three general points to be considered: (1) the recognition, (2) the treatment, (3) the explanation.

1. *Definition.*—An abscess is a swelling or thickening in a member when this increases its natural size, although barber

surgeons and laymen, who are all ignorant, do not believe that this is an abscess when there is no suppuration, or where no suppuration appears to come of necessity, and when the swelling is not great. This, however, is in contradiction to Avicenna (Chapter II., on Complicated Diseases), who says that small protrusions are small abscesses, while large ones are large abscesses.

Division—Abscesses originate from the humors of the body, from the water and from the gas. Abscesses arising from the fluids of the body originate in the blood or bile, in the mucus, or the atribile. These humoral abscesses may also originate from an over abundance of bad qualities of the natural humors. Consequently, abscesses originating from natural or unnatural humors may be composed of a single humor without the admixture of another, as, for example, pure blood. Or, they may be composed of several humors mixed together, as, for example, blood with bile or mucus. They may also be produced by certain internal causes, such as an abundance or bad condition of the humors, or by some external cause, such as a fall or a blow, or by both causes combined. In other cases the abscess is due to an occlusion, others by derivation, while still others arise from a combination of both these causes. Some project considerably, others not at all. Some protrude in part, while the remainder does not. They may originate in very important organs, in their neighborhood or at some distance from them. Then again, in the fleshy parts, in a body in the best of health or in one in bad condition, in strong bodies as well as in delicate ones.

Causes.—In order not to lose one's self in the intricacies of the unknown it is necessary to learn how each abscess has originated, whether by obstruction, derivation or in any other manner. Thus it may be said that an abscess originating at any part of the body on account of an excessive alimentation of that part, inasmuch as for some reason the nutritive substances cannot be transformed into the tissues of that part, has originated from an obstruction, that is to say, an accumulation, and in no other manner. The causes of obstruction are an excess or bad condition of the nourishment flowing to the part, and a weakness of the digestive or expelling power of the member itself. An abscess in any part of the body which does not thus originate in this fashion, but arises from substances which have been transferred to it from some other member of the body, and to which

said member cannot resist for one or several reasons, is said to have originated by derivation, that is to say, by deposit.

Adjuvant causes are weakness in the receiving member, strength of the repelling member, deeper location of one or the other, the quantity or bad condition of the transmitted substances, the caliber of the veins leading to the receiving part, or small caliber of the veins leading from it, patentcy of the receiving parts and of the glands.

There are still other causes, all of which coöperate in the formation of abscesses, but which are not necessary to enumerate here, as they have already been considered when speaking of the cause of ulcers, in Chapter I., Doctrine II., Treatise II. The recognition of abscess is greatly helped by the knowledge of their manner of originating, as will be shown in the Explanations.

Symptoms.—Regarding the symptoms of abscess in general, Avicenna says that the senses, that is to say, both sight and touch, demonstrate those abscesses that are visible, and he immediately adds that it is very difficult to enumerate all the signs of abscesses, and even were it as easy it would require lengthy explanations; therefore, it is better that the discussion of these symptoms should be deferred until the question of special abscesses is taken up. As an additional reason for this we may say that since abscesses in general do not offer any symptoms but those found in individual cases, as in phlegmon, erysipelas, and the like, the symptoms of abscesses in general in no way differ from what will be shown in the specific cases which are to follow. From what has been said certain positive symptoms may be gleaned by means of which, when we meet with an abscess, it can be diagnosticated by the experienced eye and touch.

The above mentioned definition in its single parts, the division with its variations, the causes enumerated, as well as innumerable others, along with the symptoms referred to to which others should be added, must be observed by the physician if he desires to successfully treat abscesses, because whether any specific condition, or two or more, are found present in a given case of abscess, or if they are wanting, it is necessary to proceed in some way or other, and this is characteristic for the entire general doctrine of abscesses and similar affections.

There are three kinds of general treatment—namely: (1) the preventive, (2) the curative, (3) the paliative. The preventive treatment, both in its application and indications has already

been alluded to in the preface to Doctrine II., Treatise II. Prophylaxis is a triple one according to the various periods of the disease to which it is applied: (1) the treatment of an abscess that is not yet formed, but which will be if not prevented from so doing; (2) the prevention where an abscess already exists, and will become larger if not prevented, and (3) the prevention in case a large abscess should suppurate.

The first of these is effected by four factors—namely, by the necessary control of the six unnatural things (aer, esca, quies, repletio, gaudia, somnus), by abstinence, such as the experienced physician knows how to prescribe against the cause of the disease, by medical and surgical evacuation carried out at the proper time and place.

The doctrine and prescribing of these evacuations are given in Doctrine I., Section 2, in the fifth part of the principal Chapter I., which deals with the manner of evacuating and the potions for the wounded, and also in the Explanations of the section referred to; and also by protection against contusions and similar external injuries. But this preventive treatment must not be obtained by evacuations brought about by derivation, because it is impossible to know from which spot they are to be diverted. For there is no doubt that if a body is kept in a proper condition of health no abscess will ever arise in it.

Prevention is obtained by means of three things, namely—a proper diet and evacuation, which is spoken of in Doctrine I., and if all is not said about it there, it remains for the physician to supplement it; and it may be that a local treatment will produce certain results aside from those obtained by the special ones.

Local treatments are of three different kinds: protective measures of the diseased spot, repercussion above the abscess (only in places and cases where repercussion can be borne by the patient, such cases being described in the chapters treating this matter); the application to the abscess of dissolving remedies, which are sometimes applied alone and in others in conjunction with repercussiva.

Thirdly, preventive treatment is effected in the case of a large or fully developed abscess, in order that it may not suppurate by three things—namely, good living, evacuations as above indicated, local dissolvent, and other measures, as will be described later when considering special cases. The various local treatments will be discussed in the Doctrine devoted to antidotes.

Galen formulates rules regarding that prevention in the 10th Book of the Megategni Chapter, which begins "nunc auten conderdentum, etc.," as well as Hali in his commentaries on the Microtegni, where he calls the preventive cause the preventive treatment to which the surgeon may have recourse.

In regard to the curative treatment there are eighteen general rules:

1. Each abscess arising from an internal cause has its source in a superabundance of or a decomposition of humors, or in gas or water or in both, or in several other things mentioned. In abscess arising from an external cause they are sometimes occasioned by and sometimes without those causes.

2. Every abscess is either repelled, hardened, or suppurates, and then follows the termination of which Avicenna says in speaking of acute abscess, that no abscess may be considered as nearing its end so long as pus is formed in it.

3. If an abscess can be healed by an operation without causing suppuration, it should be done, because in all cases where pus forms in large quantities fever and other dangers naturally ensue.

4. The condition of the abscess should be carefully observed by the surgeon, for his aim should be to bring about a cure without suppuration, whether the abscess is derived from external or internal causes, so that if an internal cause be connected with an excessive amount of humor and great danger involved, the treatment should begin with an evacuation. If, on the other hand, decomposed humors are present, and if the abscess be small, a rectification is sufficient. Not every unfavorable condition of the entire economy can be cured by its contrary, that is, by evacuation, for occasionally a restrictive diet is sufficient where there is plenitude, which means that the patient is fleshy and his organism in bad condition. Care must be taken not to apply local remedies in those cases where an evacuation is indicated before this can be done with propriety, because this repercussivum would not repel, and therefore would have no action on the matter. For this reason Galen says: "If we wish to collect that which is bubbling, it would not be absorbed by the full body; it happens on the contrary that if repercussiva are applied, even if for a time pain should be relieved, they nevertheless harden the abscess so that in the end the patient will be a greater sufferer." The same mistake is made in

applying dissolvent remedies, because, according to Galen, with the exception of chamomile, every dissolvent attracts more than it dissolves. He also says in II. Metategni, Chapter III., "si auten e contrario, etc." Each dissolvent is warm, everything warm attracts except when moderate.

In a like manner if an irritative is applied it will at some time or other attract fine matter by means of its warmth, which is already on the point of liquidating, and will also increase the pain and produce an enormous abscess. With regard to purgatives, something has already been said in Chapter III., Doctrine I., Treatise II. The remainder, which is sufficient for the experienced surgeon, will be found in Doctrine III.

5. An abscess of large size occurring in a full habit is treated by the four following rules, namely: (1) general purging; (2) local purging; (3) local repercussion and local protection; (4) by solution when repelling is not sufficient. This Galen says, in the chapter above quoted, when he speaks both as physician and surgeon, adding: "If what we have mentioned is not sufficient, one must resort to ripening, but this holds good immediately after the first rules given, as is explained in the above mentioned second rule—namely, that the ripened abscess should be opened."

6. In the case of a plethoric patient no severe evacuation should be given, nor should any incision be made in the diseased part excepting to give exit to the pus, because one should not evacuate, since owing to the pain of evacuation more matter will be drawn to the spot (according to Galen); therefore it results that if an abscess forms in the anus no evacuation should be allowed by means of laxatives in a plethoric patient, but should be obtained by vomiting, and if an abscess occurs over the umbilicus, the evacuation should be produced by laxatives. It thus results that under no circumstances should hot local remedies be applied, because they attract more matter from other parts. Averrhoes, however, corrects this rule in the 7th Book of his "Colliget" as follows: "When the principal bulk of an abscess has been compensated, evacuation may be made through the affected part.

7. When an abscess is commencing in a plethoric patient, the surgeon should generally begin treatment by means of a derivation, according to the rules of medicine, after purging has been produced, and in the commencement in a nonplethoric patient where no purgative has been used, by means of reper-

cussiva, excepting in those cases where either before or after the purging, even in a nonplethoric patient, a repercussive remedy is not indicated: (*a*) where the matter is thick or solid, so that the surgeon cannot repel it even where he should and ought to do so, because the matter is not suitable for this and on the contrary becomes more solid when an attempt is made to repel it; (*b*) those cases where the matter is cold, because it would not obey; (*c*) if it can be done by blocking it off, because it is better that such matter should be discharged by the member in which it is collected than by another, which nature always ascertains; (*d*) where there is a superabundance of matter, because in this case it cannot be repelled; (*e*) in a pregnant woman, because it is to be feared that the repercussivum might injure the fetus; (*f*) when a vital part is affected, because it is better for the matter to be drawn out through a nonvital part; (*g*) if suppuration is deeply seated, as for example, in the hip; (*h*) if the patient has a critical abscess, because it might kill him; (*i*) when the patient is on the way to recovery, because the pus of such an abscess represents the remainder of the former disease, which the organism expels because it is strengthened and its functions are normally carried out; (*j*) if it is in an emunctorium, because, as has been shown by all writers, no repelling but an energetic expelling method is indicated, and if necessary by gas producing means, as will be shown later; (*k*) in a youthful individual, because owing to the weak condition no repulsion will take place; (*l*) in an aged person, for the same reason; (*m*) in the neighborhood of a vital part, because if it is repelled some danger might be created for the part involved; (*n*) if the matter be hard, because it cannot be repelled and would become still more dense; (*o*) if the matter be of a virulent kind, because there will then be danger that it would be carried to the vital parts; (*p*) if the matter be poisonous, for the same reason; (*q*) if the pus is deposited in a joint, because in this case the repelled matter might enter the cavity of the joint, destroying the nerves and ligaments; (*r*) if the abscess is near the anus, because repelling causes it to be fistulous; (*s*) if it has been produced by some external cause, because it is better that the decomposed pus should be withdrawn through the skin of the injured part than that it should escape inwardly.

These nineteen rules are laid down in the well known Salernitanian rule: "Thickness, cold, obstruction, fulness, pregnancy, importance of the part of the body, subsequent crisis, con-

valescence, secretion, youth, age, neighborhood of a vital part, density, poison, seated in the joints and anus, external causes. In these cases thou shalt not repel neither prior to nor after purging, but in the other cases thou shalt repel after thou hast purged the full body, or not have purged the weakened body."

8. An abscess due to an external cause in a well preserved body does not require to be opened nor to have local protection; on the contrary it is sufficient to repel and strengthen the part by means of local remedies. Avicenna says, however, regarding the treatment of abscess, that dissolvent and softening remedies are to be applied in the beginning, but if the habit be plethoric an evacuation should precede and also other measures are to precede, which will be mentioned further on.

9. In cases of acute abscess cold applications should be made after purgation, because contrasts are cured by contrasts. Thus Galen says: "Therefore the repercussiva for acute abscess are pure styptica, dry and cold remedies, such as chimolea and similar ones, and the repercussiva for cold abscesses, if I may term them such, are to be composed of this and other warm subtle dissolving remedies, or simple remedies which are both styptic and dissolving in their quality, such as absinth and schoeanthus." Thus also does Avicenna speak on the treatment of abscesses.

10. A part of the seat of an abscess must not be moved violently nor should it be allowed to hang down. Thus if the foot be the seat of the trouble, the patient should neither walk nor stand. If the hand is involved, it should be suspended from the neck and not allowed to hang down. (Galen, de ingenio, V., Chap. IV.)

11. A member which has solid pus deeply seated, or which is covered by a thick skin, or both, requires stronger remedies than where the opposite conditions prevail, as for instance, in the foot or nipple.

12. An evacuation should never be made below the abscess, that is, so that the abscess is situated between the chest and the part through which the exit is made. Thus, in the case of an abscess of the tibia, the evacuation must not be effected through the foot, no matter what may be the stage of the disease, be it that the humors of the abscess are really discharged by means of the said evacution; be it that such is not the case, from the entire body or from the member involved, or from both, several humors will be withdrawn which otherwise would follow the

current of the evacuation towards the abscess, and these will remain in the abscess after evacuation has ceased, will enlarge it and will in the course of time become decomposed by remaining within it.

13. If an abscess is in its early stage or is growing, or if it is seated in a member very remote from the chest, such as the hand or foot, the opposite member must be violently used or it must be tied and balasted by a stone. Thus speaks Avicenna, Chap. XXV., on the treatment of abscess. For in this manner the abscess is compensated or destroyed, or at least reduced in size, because by means of such methods the flowing humor is withdrawn from a commencing abscess.

14. If an abscess commences in an emunctory, the matter should be drawn towards it thoroughly, by means of dry cupping if not possible with other means.

15. If an abscess whose complete maturity has been awaited becomes completely ripe, the symptoms of this being a decrease of the fever, redness, pulsation and pain, improvement in sleep, etc., then if it does not spontaneously open it should be incised with the knife, but observing the rules and cautions which have or are to be mentioned, and also taking into account the condition of the abscess, the quantity and nature of the matter, as well as the localisation of the abscess, for instance, near the anus or the head, etc., as well as observing the patient's condition, that is to say, whether he is a hardy peasant, or a weak inhabitant of a city, whether he is an old man or a boy, whether he is strong or weak; and also the influences of the heavens, for instance, whether the moon be free in the sky or covered, whether the moon is on the decline or has gone down, whether it is not at the end of the scales or in the beginning of the scorpion, or not in any sign, which designates the number that is to be operated on. Such signs can be recognised by the astronomer and can also be found in the planet almanac, or in the small astronomical treatise entitled "Circa instans."

The incision must be made for two reasons: firstly, because pus burrows too much; and secondly, because if we await a spontaneous opening a circular ulcer results, which heals in some cases with difficulty, while when an incision is made a longitudinal ulcer is created.

16. In cases of abscesses which have already opened, no softening or moistening remedies are to be applied, but drying ones should be used which are appropriate for the ulcer, because

we should now be more preoccupied for the cure of the ulcer than for the abscess, because the former has been added, and is more important than the latter lesion.

17. No abscess should be opened before it has sufficiently ripened excepting in six cases. The symptoms of ripening are various, according to the variety of the pus, as will be seen in the special cases. The reason for this rule is that a ripe part, which is extracted, helps another in maturation; another reason is that if an unripe abscess is opened the pain is more violent, and pain destroys the power of resistance and increases the supply of humors. The first of the six cases to be excepted is the following: if the pus is about to damage the member, or has undergone coction, because then it is better to open an unripe abscess than to lose the limb; secondly, if the abscess is situated near some vital part, in order that the matter which is retained too long in the abscess may not be drawn towards this vital part; thirdly, if it be situated in an emunctory, for the same reason; fourthly, if it be in the joints, because the pus might spread and destroy the ligaments; fifthly, at the anus, because the discharging fecal channels easily become fistulous; sixthly, if the abscess arises from a thick heavy mucus wherever it be, because occasionally such an abscess is filled with liquefied fleshy matter before it becomes ripe.

18. As soon as the abscess is ripe it should be immediately opened so that the pus may be evacuated, observing those rules and other indications which are to be observed, excepting in three cases. The reason for that rule is to be found in Galen; all things which are in the body contranaturam must be extracted, etc., and this is still more clearly demonstrated from the declarations which precede that part, and which are contained in Chapter I., Doctrine 1, Tractus 2, on the Treatment of Wounds. The first exception is where an abscess is composed of humor having undergone coction, as anthrax, etc., because the pus is as thick and as tough as skin and sinews, and because the pus will not escape after an incision is made. In this case, too, the strength of the patient is quite exhausted, and if the operation be made and the patient should die, the surgeon is responsible for his death. The third instance is where the surgeon requires money, but has as yet not received it, according to the principle: take the money while the disease still hurts, that is, because if the abscess is opened and if the fever and pain subsides, the silly surgeon frequently has to go without his fee.

(Concluded in the April number.)

Medical Expert Testimony.[1]

By Hon. CAREY D. DAVIE, Salamanca, N.Y.,
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MEDICAL expert testimony has become so important a factor in our civil and criminal jurisprudence, that the principles governing its production and application are subjects of interest to every reputable physician and surgeon. The ordinary witness speaks of tangible facts coming under his observation; his province is simply that of narration; the value of his evidence depends upon his integrity and the accuracy of his memory; whereas the expert speaks of conclusions, the result of careful study and investigation, beyond the comprehension of the ordinary observer. The value of such evidence depends upon the honor, experience and sound judgment of the expert.

We are often confronted with the spectacle of prominent experts expressing and vehemently defending opinions diametrically opposed—a fact that has contributed much in discrediting this species of evidence. I was recently engaged in hearing a case as referee, where the action was brought by a woman to recover damages for serious injuries claimed to have been sustained in consequence of a fall upon a defective walk. The plaintiff was concededly suffering from chronic spinal irritation with its usual attendant serious complications. Three medical experts, gentlemen of pronounced ability and undoubted integrity, unhesitatingly attributed her condition to the injury from the fall; three other experts of equal professional attainment asserted with the same degree of certainty, that such condition was the result of extreme illness on the part of the plaintiff through a complicated case of obstetrics two years before her fall. The measure of damages necessarily depended upon a correct determination of this question and the trial court, unskilled in these particular lines of investigation, was compelled to decide between such conflicting and irreconcilable expert testimony.

It has often come under my observation in connection with proceedings for the probate of wills, that an array of distinguished specialists unhesitatingly pronounce the testator of sound and disposing mind at the time of the execution of the will; while an equal number of experts, having had the same opportunity for forming a correct conclusion, unqualifiedly

1. Read by invitation at the 82d annual meeting of the Medical Society of the County of Erie, January 13, 1903.

testify to total lack of testamentary capacity. The same situation is observed in the records of almost every important trial where it became necessary to inquire into the cause of death, cases of homicide, suicide or accidental death; in cases of birth of infants where it was important to determine whether such infant had been born alive; in criminal prosecutions for rape, abortion and bastardy; in an innumerable variety of actions to recover damages for personal injuries where the nature, extent and permanency of such injury were involved; and in actions against members of the medical profession for malpractice involving the degree of skill usual and that actually used in the case under investigation. This state of affairs has led to many stinging criticisms upon medical expert testimony, not only from ordinary observers, but through the public press and often from high and authoritative sources. As great a jurist as Lord Kenyon, has said that skilled witnesses come with such a bias on their minds to support the cause in which they are embarked, that hardly any weight should be given to their evidence.

Judge Davis, of the Supreme Court of Maine, in his opinion in the famous Neil case says:

If there is any kind of testimony that is not only of no value, but even worse than that, it is, in my opinion, that of medical experts; they may be able to state the diagnosis of a disease more learnedly, but upon the question whether it had at a given time, reached such a stage that the subject of it was incapable of making a contract or irresponsible for his acts, the opinions of his neighbors, of men of good common sense, would be worth more than all the experts in the country.

Judge Finch of the Court of Appeals, in the case of Griswold vs. N. Y. C. & H. R. R. Co., says: "Medicine is very far from being an exact science; at the best its diagnosis is little more than a guess enlightened by experience."

Justice Rumsey, of the Appellate Division, says: "The sole difference between him (the expert witness) and an advocate being that he makes his argument under oath, and that he endeavors to add the weight of the oath to the opinion of the advocate."

Justice Adams, of Canandaigua, says: "Expert witnesses are far more anxious to destroy each other than to elucidate the particular question in issue."

Wharton, in his noted work on Evidence, after observing that expert testimony when first introduced was regarded with great respect, because an expert was then viewed as the repre-

sentative of a science of which he was a professor, giving the impartial conclusions of such science, continues:

Two conditions have combined to produce a material change in this relation. In the first place it has been discovered that no expert, no matter how learned and incorrupt, speaks for his science as a whole; few specialties are so small as not to be torn by factions; and often the smaller the specialty the more bitter, inflaming, and distorting are the animosities by which these factions are possessed; particularly is this the case in matters psychological, in which there is no hypothesis so monstrous that an expert can not be found to swear to it and defend it with vehemence. *Nihil tam absurdo*, which being literally translated means that there is nothing so absurd that the philosophers wont say it.

Now, I do not quote these expressions with any degree of personal approval, but simply to show that criticism does prevail, in order that we may, if possible, ascertain the cause and determine the best method of refuting such criticism if unjust, or eradicating the occasion for it if well founded. In attempting this task I shall make certain general observations upon our existing system of expert testimony, then suggest certain changes which I believe would be beneficial.

The practical value of the testimony of an expert depends largely upon his personal appearance and conduct as a witness. No one can successfully meet these requirements without possessing a comprehensive understanding of what expert testimony really is, his duties and obligations, rights and privileges in regard to the same. If a physician is called to testify as an expert in some particular case, it does not imply that he is retained as special counsel in such litigation; it affords no reason why he should become unduly solicitous for the success of the party by whom he is called; it does not mean that the physician has become substituted as a party of record in the case; the success of the party for whom he appears does not necessarily establish a vindication of his views and theories, nor the defeat of such party condemnation of his professional judgment. All the expert is called upon to do is to testify to what he may actually know regarding the matter in controversy, and conscientiously express his opinion based upon such knowledge. Having done this his functions in the case are terminated; the lawyers will look after the conduct of the litigation, and the defeated party and not the expert will be called upon to pay the costs. Jurors are usually acute in discerning the motives and

interest of a witness, and the moment it is discovered that the expert is strongly biased in favor of either party his evidence loses much of its force and weight.

Again, testifying as an expert is in no sense a species of dress parade for the doctor; it is not designed as a public exhibition of the expert's attainments and qualifications; he is not produced for the purpose of edifying his hearers with professional gymnastics, nor is his cross-examination intended as a wrestling match between the witness and counsel. A judicial investigation is not a Vanity Fair; there are no settings of red fire or pyrotechnics in connection with the testimony of the conscientious expert, whose only desire is to aid the machinery of justice in determining where the truth of the controversy actually abides. Many an expert has met his Waterloo because of his attempts at wit and his efforts to irritate the counsel; the lawyer always has the advantage; if you wish to "get even" with him wait until you have him upon the operating table for an amputation or to remove the appendix.

No physician should permit himself to be used as an expert unless he is thoroughly conversant with the subject matter under investigation; the inefficient witness either produces incalculable harm, or makes himself ridiculous by an exposure of his charlatanry through the instrumentality of cross-examination. It is injudicious for the doctor to deal in fallacies because he speaks of subjects beyond the comprehension of the ordinary observer; his bauble of error may be punctured, showering him with confusion. A physician of a rural county was recently called to testify to the insanity of the defendant in a criminal prosecution; in point of experience he was no better qualified as an alienist than a village blacksmith; having testified that the defendant was a "monomaniac" he was requested to explain upon cross-examination the technical meaning of the term "mono" as used by him; he said that "mono" meant a part; that insanity was an affection of the mind, but whether a monomaniac was a man whose mind was partly affected or a part of whose mind was affected, he could not tell; but he finally succeeded in defining a monosyllable as a word of two and a dissyllable as a word of three syllables.

The expert should avoid the use of technical terms; he should give his testimony in the English language; nothing is more absurd than for the expert who is called for the purpose of elucidating some proposition pertaining to his profession,

attempting to do so in phrases absolutely meaningless to the jury and often to his honor upon the bench. There are but few medical terms or expressions not susceptible of translation into language within the comprehension of the man of ordinary experience. The functions of an expert are those of a demonstrator and not a mystifier; it is clear, practical elucidation and not legerdemain that the occasion requires. The expert's statement that a certain person whom he was describing had a small excrescence or tumor of the skin, consisting of hypertrophied cutaneous papillæ, bound together with hard scaly epithelium, might be technically correct, and yet it would hardly convince the ordinary juror that such person had simply a wart upon his nose. It is as easy to speak of water as aqua pura; of whiskey as spirits frumenti; of salt as chloride of sodium.

The task of the expert upon his direct examination will usually be free from embarrassment; he will ordinarily have an opportunity of conferring with the counsel calling him, before his examination, regarding the general features of his evidence. This is not only a proper but a necessary preliminary; no careful lawyer attempts to examine an expert without previous consultation; and the doctor should not consent to testify as an expert, without being fully appraised in advance of the general trend of his examination. The examination in chief is often unproductive, and sometimes farcical, because the counsel and the expert are not "in tune"; they misunderstand each other; meaningless questions elicit confusing and unfortunate answers; but to the lawyer who possesses a clear conception of what he desires to prove, and to the expert who has had an opportunity of logically arranging his thoughts and concisely formulating his manner of expression, the pathway of examination in chief will be beset with but few perils. It is the cross-examination which tests the mettle of the expert; in order to successfully pass this ordeal, the expert should thoroughly understand the methods or characteristics of his cross-examiner; he will belong to one of three classes; one can easily diagnosticate his case and determine to which class he belongs. He may be the professional "bulldozer" who glares at you, talks in a loud tone, treats you as if you had insulted him, frequently admonishing you to "remember, sir, you are under oath," bristling with pointed and irritating interrogatories, like the quills of the proverbial fretful porcupine. Have no fear of him; it is the lightning and not the thunder that kills; self-possession,

unruffled good nature, and short and decisive answers on your part will soon place your would-be tormentor entirely *hors de combat*.

Again, you will be confronted with counsel who has evidently primed himself for your cross-examination by a somewhat careful study of the medical authorities bearing upon the subject under investigation; under the pretext of testing your competency as an expert, he will subject you to an examination reminding you of your experiences while being examined for your degree. For example, if the case under investigation be one of arsenical poisoning, he will insist on your describing arsenic, its chemical formula, its color, specific gravity, atomic weight, vapor density and the process of its preparation by sublimation; he will call for a detailed explanation of Marsh's test; he will inquire as to the most effective chemical antidote for arsenic, and if you answer that it is the hydrated sesquioxide of iron, he will ask you to explain the reason why! his object being all the time, not to develop any information germane to the issue, but to discredit you; to find some opening in your armor; to compel you to confess your ignorance and, incidentally, to show the jury how much more efficient he is, who is simply a lawyer, than you are, though posing as an expert.

This line of cross-examination may be somewhat troublesome; the court can hardly interfere, even upon the objection of the opposing counsel; the only satisfactory method of fortifying yourself against such an attack is by absolute familiarity with all the details of the subject under investigation. If you are unable to answer any particular interrogatory frankly acknowledge your inability; never hazard a guess; an erroneous answer however unimportant or foreign to the issue, will be detected and used to discredit you; you have an absolute right to say you do not know; the court and jury will respect your candor and you will thereby wrest from your examiner the weapon he is seeking to use against you.

Again, you will meet the cool, deliberate and thoroughly well-informed cross-examiner. Counsel appearing for corporations and wealthy litigants are usually of this class; they have had extended experience in this line of cross-examination; they are competent to grasp the full import of your testimony; they will treat you with the utmost respect and gain your confidence if possible; they will carefully and craftily lead you along from one proposition to another, and before you

realise your peril will elicit a line of answers absolutely irreconcilable with your previous testimony. They will dismiss you with all due deference, but you may depend upon it, they will skilfully remove your professional cuticle in the final argument before the jury. Dealing with this class of cross-examiners calls for the utmost tact, coolness, deliberation and absolute frankness on the part of the expert; a thorough familiarity with the subject and an unwavering fidelity to the absolute truth will ordinarily afford you a sufficient shield and protection.

The attendance of an expert upon the trial of an action is accomplished through the instrumentality of a subpena and the payment of the statutory witness fees. The impression sometimes prevails that an expert is justified in refusing to obey the requirements of the subpena until he is paid the fees of an expert; this impression is erroneous and if persisted in might land its advocate in jail for contempt of court. The physician must obey the mandate of the court and his rights as an expert will be guarded in the progress of the proceedings.

It has been a subject of interesting discussion whether experts should receive any other compensation than that prescribed for ordinary witnesses. The decisions upon this subject are not uniform, the courts of many states holding, that it is so far a necessary part of the judicial system that the expert may be called upon to express the results of his knowledge, skill and experience without extra compensation. The courts of other states have recognised the claim and supported it by decisions, that the knowledge and skill acquired by study and experience along special lines become a species of property, and the enjoyment and possession of the same fully protected by the constitutional guarantees. In this state the proposition is well settled, that one can not be compelled to testify as an expert until he has been compensated as such; then the proper course to be pursued by the physician who has been subpened is to obey the mandate and arrange, if possible, with the counsel calling him as to his fees; or, when asked to give expert evidence, decline to do so until proper compensation has been provided for. It is the duty of the court to protect the expert in the exercise of this right.

It is a proper subject of cross-examination as to what compensation has been paid or promised the expert as a witness. In one case it was held that where the expert admitted that his compensation was contingent upon the result of the litigation,

he was disqualified from testifying at all. The subject of compensation being a proper matter of cross-examination for the purpose of developing the interest of the witness, he will avoid embarrassment by frankly answering every proper question put to him upon that subject.

It is the province of the court to determine the question of the competency of a witness presented as an expert; such inquiry, however, is governed by well-defined rules and principles. If it appear upon such examination upon the question of competency that the witness is duly licensed to practise medicine, that fact alone entitles him to be sworn as an expert and the court can not exclude his evidence, though he may never have had a case similar to the one under investigation. The question of his actual competency or incompetency must then be determined by direct and cross-examination, and the jury are the sole judges of the weight and value of such evidence. In the case, People vs. Rice (159 N.Y., 400), the Court of Appeals lays down the rule that if a man be in reality an expert upon any given subject belonging to the domain of medicine, his opinion may be received by the court though he has no license to practise; but the court further asserts that such testimony should be received with great caution, and only after the trial court has become fully satisfied that the witness is fully competent to speak upon the particular subject under investigation; where, therefore, the witness is not *prima facie* competent, because not licensed to practise medicine, it is incumbent upon the party calling him to prove him to be an expert before his testimony can be taken.

We are next led to enquire of what expert testimony consists; what the legitimate sphere of the expert is. The elementary writers upon the subject of evidence all attempt to define expert testimony, but the most lucid explanation—not definition—I have discovered, is that of Judge Werner, of the Court of Appeals, in the case of Daugherty vs. Milliken, 163 N. Y., 527. He says:

There are two classes of cases in which expert testimony is admissible, those where the conclusions to be drawn by the jury depend upon the existence of facts which are not common knowledge, and which are peculiarly within the knowledge of men whose experience and study enable them to speak with authority upon the subject. In such cases the facts are to be established by expert testimony; but the conclusions to be drawn therefrom are for the jury; this situation may be plainly illus-

trated in case of death from arsenical poisoning; it is the province of the analytical chemist to determine through the instrumentality of chemical analysis the presence of arsenic in sufficient quantities to produce death; that fact being established it becomes the province of the jury to determine the circumstances under which the poison was administered; of which the famous Benham case is a good illustration. In the other class are those cases where the conclusions to be drawn as well as the knowledge of the facts themselves, depend upon professional or scientific knowledge not within the range of ordinary training or intelligence. In such cases not only the facts but the conclusions to which they lead, are to be testified to by the expert. This class may be illustrated by the frequent cases to recover for personal injury where the medical expert is called not only to state the nature of the injury, the facts regarding the same, but also to give his opinion as to its results and permanency.

But it is the same here as elsewhere, much more easy to enunciate a general rule than to apply it to individual cases; the combinations of facts and circumstances presented to the legal practitioner are as varied as the hues of the kaleidoscope. Courts accordingly find it difficult to make application of the principle stated, though apparently so plain and well defined. We, therefore, find our judges at times disagreeing as vigorously as medical experts ever do. In the case of Strohm vs. The N. Y. C. & H. R. R. R. Co., the Court of Appeals reversed the judgment of the trial court which had been affirmed by the General Term, because an expert had been permitted, under objection, to testify that "a patient sustaining such injuries, and presenting such premonitory signs, *may* develop traumatic insanity, or meningitis, or progressive dementia, or epilepsy with its results."

Judge Rapallo, in his opinion says:

Future consequences, which are reasonably to be expected to follow an injury, may be given in evidence, for the purpose of enhancing the damages to be awarded; but to entitle such apprehended consequences to be considered by the jury they must be such as, in the ordinary course of nature, are reasonably certain to ensue; consequences which are merely speculative, contingent or merely possible are not to be considered in ascertaining the damages.

The significant circumstance with regard to this decision is that Chief Judge Ruger and Judge Danforth dissented from the prevailing opinion, each holding that evidence by experts of

the probable and even possible consequences of the injury, are admissible for the consideration of the jury.

In the later case of Griswold vs. The N.Y.C. & H.R.R.R. Co., Judge Finch, in his opinion, recognises the wisdom of the earlier cases which preclude the giving of evidence of future consequences which are contingent, speculative, and merely possible, but says that such rule in no manner conflicts with the principle allowing the evidence of physicians as to the plaintiff's present condition, its cause, and probable permanency. He further says:

There is an obvious difference between an opinion as to the permanency or a disease or injury already existing capable of being examined and studied, and one as to the merely possible outbreak of a new disease or suffering having their cause in the original injury; in the former case, that disease or injury and its symptoms are present and existing; their indications are more or less plain and obvious; and from their severity or slightness a recovery may be reasonably expected or the contrary; while an opinion that some new and different complication will arise, is merely a double speculation, one that it may possibly occur, and the other that if it does occur, it will be the product of the original injury instead of some new and perhaps unknown cause.

The difficulties the courts have to contend with in determining what is competent expert testimony may be best illustrated by referring to a few prominent decisions:

A physician who witnessed a homicide and who has described the entire transaction, may be permitted to testify whether the defendant's appearance and manner at the time indicated insanity. (People vs. Krist, 168 N.Y., 19.)

A physician who has made an autopsy on the body of the deceased may testify on the trial of an indictment of murder, that the injury on the head which caused the death, could not have been produced by a single blow; the matter being one of medical science and skill, involving technical knowledge of anatomy and therefore properly the subject of expert testimony. (People vs. Schmidt, 168 N.Y., 568.)

A physician who examined a woman for the purpose of testifying at the trial of an action brought by her to recover for damages for injuries sustained by her, may state what occurred in the examination, the manner of application of the tests, and the woman's acts and exclamations so far as they do not embrace statements made by her to him as her physician. (Zingrebe vs. Union Ry. Co., 56 Appt. Div., 555.)

An expert may make illustrations on a blackboard for the purpose of explaining his testimony and making it more intelligible. (McKay vs. Lasher, 121 N.Y., 477.)

An expert can not read in connection with his testimony from his own published books upon the subject. (Mix vs. Staples, 44 St. Rep., 399.)

Medical works cannot be read in evidence nor can medical experts testify to statements which such works contain. (Matter of Mason, 60 Hun, 46.)

It might be well in this connection to note, that the only use that can be legitimately made of medical works upon the examination of an expert is upon his cross-examination; he may then be asked if the author of such and such a work is an authority upon the subject of which he treats; the cross-examining counsel may then read to the witness a statement from such work and ask the witness if he concurs in such statement, the purpose being to show that the opinion expressed by the witness is at variance with that of the author.

Again, it is sometimes difficult to establish the line of demarcation, between expert and non-expert testimony. This situation was well illustrated by the case of Manke vs. People, 78 N.Y., 611. In that case one Adolph had been killed by a gunshot wound; pieces of paper were found near the scene of the homicide bearing certain marks; an expert was called to testify whether they were powder marks and whether the condition of the paper was such that, in his opinion, it was wadding fired from the gun. The trial court excluded the evidence and its conclusion in this particular was sustained by the General Term and the Court of Appeals. Justice Tallcott, presiding judge of the General Term, in his opinion said that the case was very close to the border line but, in his judgment, it was beyond the province of experts and within the province of the jury.

Now, we can easily understand how there may be very pronounced differences between the opinions of experts, without finding it necessary to impugn the integrity of either. Lawyers of extensive practice can easily comprehend this situation. Lawyers differ in their opinions regarding a novel legal proposition as radically as medical experts ever do. The lawyer who takes a case, and becomes interested in its prosecution or defence, looks upon all the facts connected with the same in the light most favorable to his contention; he examines the law with the hope—the belief—that his views are correct; he searches for authorities sustaining them; he reads every case bearing upon the subject with the view of detecting something to justify his conclusion; he often distorts the fair meaning of

decisions in his zeal to make them conform to his ideas. The only impartial student of the law is one who examines his authorities in a judicial capacity, having no interest in the result, except to do what is absolutely right.

Under our present system of expert testimony the witness at once becomes interested in the result of the litigation; an attorney having an action involving the determination of some intricate expert proposition, sets out to find his expert; he realises in the first place that such expert must be a professional man of good standing and reputation whose opinion would be likely to carry weight and conviction; having selected his witness he states to him the facts in the case from his viewpoint, placing his own construction upon them; he tells the doctor that he desires to establish a certain proposition, at the same time vigorously asserting his belief in the same; he tells him that if he agrees with him and can establish such position by authorities he desires to use him as a witness, and that he will properly compensate him. The very moment the doctor consents to such arrangement he becomes as much interested in the final result of the controversy as the lawyer himself; he begins thinking along the lines indicated; if he has doubts he reasons them away; he consults his authorities culling out the portions sustaining his contention and discarding those which do not; he becomes imbued with the belief, perhaps unconsciously entertained, that he has a direct personal interest in the litigation.

The criticism upon all this is not so much upon the doctor as upon the system; just as long as our present system prevails so long shall we encounter the conditions to which I have referred; as long as parties or their attorneys are permitted to select their own experts, schooling them in advance along the lines desired, so long will we find this radical conflict in the opinions of the experts on opposite sides of a case and upon propositions where it would seem to the ordinary observer that doctors should agree.

The question naturally arises, What is the remedy? How should our present system of practice be modified so as to eliminate these difficulties? This is, of course, the all important consideration, but I must confess that the solution of this problem is not free from difficulty. Several methods have been proposed by lawyers who have given this matter careful consideration and yet no plan has been suggested which meets the

requirements. The system prevailing in this country and in England has often been compared with that in vogue in France and Germany, where the expert is designated by the court and so far as his functions in a particular case are concerned he becomes a part of the judicial system. The comparisons made between these two systems are usually in favor of the French and German methods, and yet they are not free from fault; they complicate judicial procedure, impose upon courts the extra responsibility of selecting the expert, and subject the court to the criticism of having made a selection favorable to the successful party.

It has also been proposed that a state commission of experts should be created, a member of which should attend and testify at the trial of cases involving expert questions. A little consideration, however, will show how intensely impracticable is such a scheme; expert testimony covers the range of every known science and every skilled occupation; it would be utterly impossible to establish a commission, no matter how large, competent to deal with all the subjects which claim the attention of the expert. As a result, a separate commission would be required for almost every field of human investigation and the expense of maintaining the same would be beyond computation.

A condition should be created by public sentiment if possible or by actual legislation if necessary, making the existence of the professional expert witness an impossibility. I do not wish to be understood as casting any reflection upon any physician because he is frequently called as an expert witness, for I regard such a situation complimentary to him. By the term "professional expert witness," I mean the one who makes his professional opinion an article of merchandise in the legal market ready to be sold to the highest bidder. This class of witnesses is by no means a myth; the country is filled with them; they are usually ingenious, crafty and unscrupulous; having sold an opinion, they become solicitous to have such opinion prevail, whether right or wrong, in order to enhance the market value of their opinion when needed again; the innocence of a defendant is of no consequence where the opinion of the professional is assailed; to gratify his professional pride and ambition he is willing to consign even the innocent to prison or the electric chair.

I was on one occasion connected with the contest of the probate of a will, where it was claimed that the signature to the will was a forgery; a professional expert on handwriting was

consulted who offered to demonstrate the forgery before the jury, making his fee of $500 contingent upon the result; the contestant, declining such offer, was met upon the trial of the case, with the evidence of this same witness with a detailed explanation amounting to almost a mathematical certainty that the signature to such will was genuine. I would as soon rely upon the opinion of Judas Iscariot as to the efficacy of the vicarious atonement, as upon the opinion of such a witness. The achievements of this class of experts are not only repugnant to one's sense of humanity and justice, but are also largely responsible for the adverse criticisms passed upon your profession. It is your duty, as representatives of one of the most magnificent of all the learned professions, to zealously guard the honor and maintain the dignity of such profession; you can best accomplish this result by an extermination of the class of professional vipers to which I have referred.

Then, again, there should be a radical modification of our present method of using hypothetical questions in the examination and cross-examination of witnesses; the practice which has developed and so extensively prevails along this line has become simply farcical, where not absolutely dangerous. The proposition is axiomatic that a hypothesis founded on fallacy can never evolve the truth; if the facts in a case were all conceded then a hypothesis based upon such admitted facts might throw some light upon the controversy; but when the facts are controverted, as they usually are in litigations, this practice of examination by hypothesis is confusing, misleading and by no means conducive to honest and equitable results. The purpose of the examiner in framing his hypothetical question is two-fold; first, to so state it as to insure a favorable answer; and, second, to so disguise the assumed facts that the jury may consider the answer alone. Under our present system of evidence the attorney calls his expert, reads to him a complicated hypothetical question covering the facts as such attorney claims them to be, and asks for the witness's opinion. The opposing counsel calls his expert, frames his hypothetical question in accordance with his views of the facts and asks the opinion of the witnesses. The argument is then made by each counsel to the jury that the opinion of the opposing expert is worthless because based upon facts not established by the evidence; consequently the jury either ignores the entire proceeding or, what is more likely, derives impressions therefrom radically and fatally wrong.

The vice of the hypothetical question as used in our present practice is that such question is usually predicated upon isolated or disconnected facts or statements; it is a matter of common observation that the rationality or criminality of any particular act or statement is not determined so much from such act or statement independently considered, as from what immediately preceded or followed it; no reliable estimate of one's mental condition can be predicated upon isolated and independent acts; it is the entire line of conduct, each act being examined with reference to what preceded and that which followed it, which indicates whether the man is controlled by the dictates of sense and reason, or by the illusions of a disordered mind or imagination.

In the Matter of Jones, it was shown that the testator was accustomed to speak of his estate with great exaggeration, saying that he had more property than any one knew of, sufficient to make all his relatives rich; he asked the witness Brown to give him his daughter, saying that he wanted her for his wife; that he would make her a necklace of twenty dollar gold pieces that would go around her neck and reach to the ground, one that she could jump through. The evidence showed that he was of a licentious nature, vulgar and indecent in conversation, passionately fond of narrating his amorous exploits, speaking of his liaisons publicly and boastingly, and the court, in deciding the case, said that the inference was fairly justified by the evidence that the testator was either a notorious romancer or a veritable Don Juan.

In the Matter of Vedder, it was shown that the testatrix had a firm belief in witches and witchcraft; that she entertained various hallucinations such as that she had seen and conversed with Jesus; that if live coals and a red garter were put under a churn, the butter would come; that it was impossible to keep her horses in good condition because the witches rode them at night.

In the case of VanGuysling vs. VanKuren, it appeared that the testatrix believed she was tormented by witches and spooks which kept her awake at night; she became violently enraged when told there were no witches and spooks; she imagined she saw things which did not exist, and described visions she had while sleeping; she used her fingers in place of knife and fork, and her eyes were frequently wild and glaring. In either of these cases, a pronounced opinion of mental incompetency from

honest experts would have been elicited, in answer to a hypothetical question based solely upon these particular acts or lines of conduct, and yet in each case the will was admitted to probate and the testamentary capacity of the testator established because such acts and statements, when viewed in the light of the general line of conduct of the testator, were seen to be of but little importance.

In a will contest recently tried in Cattaraugus County it appeared that the will offered for probate was executed on the 21st day of May, 1901; on the day following its execution the testatrix inquired of a neighbor how much arsenic would be required to take one's life; she had frequently expressed a determination to commit suicide; on the 29th of May, she was found hanging by the neck from the rafter of her barn, having committed suicide. A physician of that county, who had been well acquainted with the testatrix for many years, and who had attended her and had had business transactions with her, pronounced her entirely sane at the time of the execution of the will. I quote from the cross-examination of the same witness:

Q. Do you regard suicide as evidence of insanity?

A. I do.

Q. In your opinion was this woman insane at the time she committed suicide?

A. I think she was.

Q. Do you regard a settled determination and design to commit suicide as evidence of insanity?

A. I do.

Q. Now, assuming that this woman committed suicide by hanging on the 29th of May; that on the 22d of the same month she inquired as to the amount of arsenic required to take one's life; that she had often expressed a determination to take her own life, what in your opinion was her mental condition on the 21st, the day of the execution of the will.

A. If I were to base my answer upon the facts stated in the hypothetical question, I should say she was insane, but I am unable to reconcile my opinion as an expert based upon such a hypothesis, with my opinion based upon personal observation of this woman for many years before her death and even after the date of the will.

These illustrations are entirely sufficient to establish the force of the criticism I have made upon evidence of this character. It is true that the total abolition of hypothetical questions would effect a very radical change in our present system, because it would eliminate all medical expert testimony except where the witness testified from personal observation and exam-

ination. The witness having examined the patient and detailed the results of such examination and the facts thereby disclosed, might then express his professional opinion regarding the same; such an opinion would be valuable because based upon actual facts coming under the personal observation of the witness, and not upon some vague and confusing hypothesis. In most cases no hardship could result from the application of such a rule, because under existing laws the opposing party has the right of personal examination of the injured party by his own expert, thereby qualifying him to speak from actual observation.

Again, the compensation of experts should be in some manner regulated and limited; every expert when called upon to testify as such should receive fair and reasonable compensation for his time and services; such compensation should be as much as he would ordinarily receive for the same amount of time and service in the usual performance of the duties of his profession. Compensation to that extent is just and honest; but every dollar paid an expert in excess of such a sum for the purpose of stimulating his zeal or biasing his judgment is decidedly unfair and dishonest. An established rate of compensation, would relieve your profession from much embarrassment arising from the necessity of making a contract as to your fees each time you are called as an expert, or from calling for the protection of the court when some attorney attempts to obtain expert testimony from you for ordinary witness fees.

The conclusion reached from this line of thought is, that the defects existing in our present system of expert testimony are more the fault of the system than of the doctor. As a rule, the doctor is honest and conscientious; give him an opportunity of expressing what he may know unfettered by technicalities and we need have no fears of medical expert testimony. History records the fact that after the death of Esculapius, he was placed by the Greeks among their demigods and the Romans constructed a temple upon the island of the Tiber to perpetuate the fame of the "Father of Medicine." From that day to this mankind has honored and respected this profession. We trust the doctor in our most trying ordeals; when the messenger of death is hovering near and we can almost hear the dread summons to "join the innumerable caravan," our faith, our hopes are all centered in the skill, intelligence and ability of the doctor; we certainly can rely upon his integrity where our welfare as litigants is involved.

Some of the Causes Leading to and Producing Suppuration.[1]

By FRANCIS W. McGUIRE, M. D., Buffalo, N. Y.

WOUND infection is a condition which has existed since the beginning of operative surgery. Previous to the days of antiseptics infection was almost a universal rule, but even today it occurs occasionally with all our improved technic. Since the time of Lister there has been a continuous volley fired at the microbe and in our endeavor to completely eradicate this thorn from the side of surgery, we have too frequently neglected other important measures. It is not my object to detract in any way from the importance of our present methods of asepsis, but, on the contrary, I would like to point out a few glaring evidences of defective technic which occasionally are causes of wound infection.

Regarding many of the points I make no claim for originality. While the attention of the surgical world has been called to these conditions on numerous occasions yet their frequent occurrence seems to justify still further emphasis.

One of the first defects with which one is confronted is improper plumbing. The basins are so constructed that in order to bathe the hands with any degree of comfort one is compelled to wash in standing water, one of the most filthy habits. Running sterile water is the ideal arrangement for washing the hands and consequently the plumbing should be so arranged that first the water is controlled by the foot; second, the hot and cold water should come through a common faucet; and, third, this faucet should be placed a sufficient distance from both the wall and basin that hands and arms need not come in contact with either.

Some surgeons seem to be imbued with a false sense of security in the use of antiseptics. It has been observed frequently that after the reinfection of hands during an operation, the surgeon will simply dip them in the antiseptic solution and his surgical conscience is immediately relieved, believing that he has destroyed any germs that may have been lodged on hands or arms. This method cannot be too severely condemned and I have no doubt if the antiseptic solutions were discarded from our operating rooms, we would have cleaner hands by having more effective mechanical cleansing.

1. Read before the section on surgery, Buffalo Academy of Medicine, January 6, 1903.

Next, notice the soap and brushes. Here you meet with a condition that is frequently disgusting, and one feels that it would be better to leave the patient to the ravages of disease rather than subject him to an operation under such conditions. The soap is not sterile, and is placed in vessels so constructed that it is impossible to extract it without coming in contact with the dirty edge of its container. The brushes may have been placed in some antiseptic solution, but are seldom sterilised. Frequently they are of the poorest quality, and, as a rule, have been used so long that there are scarcely any bristles left with which to do effective scrubbing. Assuming that we should introduce the least possible amount of septic material into our operating room, I believe we should not wear our street clothing. Street shoes should be changed for those which can be easily cleansed, and the trousers for those that can be sterilized, both of which can be readily obtained. A sterile long-sleeved gown should be worn, changed when infected, or at least after each operation.

The assistants and nurses should be of the least possible number, as the fewer the hands that come in contact with an operation the better. Two sterile nurses are ample, and possibly one is sufficient if the surgeon has two assistants.

Catgut is a material that is very frequently misused. It should be placed in wide-mouth jars, removed with a clamp, and in no case should it be returned to the jar when once removed, as there is a great probability of its becoming infected. The technic of handling catgut I will not discuss, but will simply say that it should be handled as little as possible. Literature, domestic and foreign, has been prolific regarding the sterilisation of catgut, but, in my opinion, less trouble would accrue from its use if greater care were taken in handling it after its sterilisation. Regarding sterilisation, other things being equal, the greater the degree of heat the better the method. Considered in this light, cumol seems to answer the requirements better than any other method. Another good way to prepare catgut is by the formalin method. This method is simpler than the cumol, as the latter method requires a special steriliser. I have seen a great deal of this preparation used with entire satisfaction.

Instruments that have become infected from any cause should be discarded immediately. This rule seems to be occasionally forgotten, especially when infected from the intestinal canal in such operations as intestinal anastomosis, appendectomies, and the like. Basins that are used in operations should be sterilised

by heat. We are not sure of their being sterile when simply washed with a cloth dipped in bichlorid solution, as is the custom in some institutions.

Wounds should be handled as little as possible. The self-retaining retractor is an instrument that should be used more frequently, especially in abdominal work. It prevents handling the wound, protects its edges and holds it open to greater advantage than can an assistant. The ungloved hand must be a prolific source of wound infection. Today it is known that there is no method of rendering the hands sterile. The surgeon will take all manner of trouble to render his instruments, dressings and ligatures sterile, but will without hesitation use his uncovered hand in the wound. Acting according to our present knowledge, it must appeal to everyone that the only positive method of having hands noninfectious is to cover them with a pair of sterile rubber gloves.

The protection of the operating field by towels is unsatisfactory and not frequently do we find them misplaced some distance from their original position, thereby exposing an infected surface. The better cover seems to me to be that by an apron with a small hole, which cannot be displaced. The hole can be easily enlarged to meet existing circumstances.

The part of my paper that I wish to emphasise more especially is the increasing of the resistance of the patient. Bouchard has told us that "physicians ought not to permit themselves to be occupied alone with the research after microbes, but that they ought to busy themselves as well with investigating the circumstances which disarm the organism against microbic invasion." Lawson Tait's method of operating has taught us that by conserving the natural resisting forces of the patient he could almost do away with antiseptic methods.

Autointoxication is of special importance to the surgeon, because the infectious organisms find tissues depressed by the absorption of excrementitious principles, much more vulnerable than those of the healthy individuals. It is important that the bowels should be in a state of activity, in fact they should be as nearly empty as possible, since the loss of a moderate amount of blood and the frequent inability of the stomach to retain water, make absorption of the fluids from the intestines likely to occur. Before undertaking surgical procedures the condition of the heart and lungs should be ascertained, for in certain organic diseases these organs, by the additional burdens of an

operation, may cause an autointoxication which, if not dangerous in itself, may become so by favoring local or general infection.

The liver and skin should not be overlooked in preparing a patient. The subject of autointoxication has been too commonly left to the domain of general medicine, and one in which the surgeon as such need take only a passing interest. Park has well said that:

> The surgeon will prove himself the best master of the situation who is thoroughly conversant with all that the general topic of autoinfection comprises and implies, for he will find that his surgical patients will do well or badly just in proportion as he maintains the equilibrium between ingestion and egestion, or as he realises that retained excrementitious products are among the most active predisposing causes of what may be a little later a distinct surgical sepsis.

For a moment let us digress and see what can be done toward increasing the patient's resistance to infection. Where time and circumstances permit, the patient ought to be under treatment at least four days, and in some cases even a longer period of time could be used to advantage. During this period the patient should not indulge in any dissipation; he should have strychnin three or four times a day and sufficient cathartics to keep the bowels moving twice a day. About six hours before operation he should receive an enema and bowel wash. The quantity and quality of urine should be ascertained. He should drink two quarts of water every twenty-four hours and receive a sweat bath every second or third day, followed by a hot bath. The stomach should not receive any food for at least six hours previous to operation.

In preserving the patient's resisting power, I believe there are a few things that compare with rapid operating; almost all patients are in good condition no matter what the operation is, at the end of fifteen minutes of anesthesia, and almost no patient is in a good condition at the end of an hour and a half or two hours. Morris has said that "if work is done in fifteen minutes the operation is executed, but if in an hour and fifteen minutes, perhaps it is the patient that is executed."

The anesthetic and the manner of administration has an important bearing. The commencing of an anesthetic by nitrogen monoxide gas, followed by either ether or chloroform, has the advantage of getting the patient anesthetised quickly with

a minimum of anesthetic. An anesthetist who does not know how to administer all anesthetics has no place in an operating room, as a patient may be left in such a condition by the anesthetic, even if operation is skilfully performed, that the slightest amount of infection may prove serious. A carefully prepared patient, a rapid but careful operation, a competent anesthetist, and an exacting technic, make a happy combination in an operating room, which will give almost absolute assurance against infection.

1540 Main Street.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

Eighty-Second Annual Meeting, January 13, 1903.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

THE president, Dr. W. M. Ward, called the 82d annual meeting of the Medical Society of the County of Erie to order at 10 a.m., Tuesday, January 13, 1903, in the parlors of the Young Men's Christian Association.

The minutes of the semi-annual meeting and of the memorial meeting, held on the death of Dr. Thomas Lothrop, were read and approved.

A communication received from the New York State Nurses's Association was laid on the table.

Dr. William Warren Potter, chairman of the committee on membership, presented the names of the following applicants, entitled to practise medicine under the laws of this state, and on his motion they were elected members, viz.: Dr. Henry E. Long, Dr. Edward James Cook and Dr. Albert Satterlee.

Dr. W. C. Callanan, librarian, stated that a very substantial gift had been added to the society's library, as shown by a letter from Dr. J. W. Grosvenor, which he submitted. In the letter Dr. Grosvenor stated that the family of the late Dr. John Cole, of Buffalo, had requested him to deliver to the Medical Society of the County of Erie Dr. Cole's library, consisting of 139 volumes. Dr. Grosvenor had complied with the request and had filed a list of the books with the librarian. The cartage

charge on the books was $1.50, and on motion of Dr. Callanan the treasurer was directed to reimburse Dr. Grosvenor for his outlay.

Dr. Wm. C. Callanan urged the society to take more interest in attending the obsequies of deceased members, stating that on some recent occasions the number had been almost disgracefully small.

The president appointed Drs. Fronczak, Stoddart and Jolls a committee to nominate officers for the ensuing year. They submitted the following nominations and on motion the secretary was directed to cast the ballot of the society for the nominees, and they were declared duly elected—namely: president, Ernest Wende; vice-president, John D. McPherson, Akron; secretary, Franklin C. Gram; treasurer, Edward Clark; librarian, Wm. C. Callanan; censors, Irving W. Potter, chairman; John B. Coakley, Henry R. Hopkins, H. Lapp and F. E. Fronczak; committee on legislation, Ernest Wende, William Warren Potter and Edward Clark; chairman of committee on membership, William Warren Potter.

On motion of Wm. C. Krauss the president and secretary were empowered to fill any vacancies that might occur.

Dr. Coakley submitted the following report from the board of censors:

To the Medical Society of the County of Erie:

Since its last report your board of censors has continued its work of investigation of cases of alleged illegal practitioners of medicine and surgery in the County of Erie.

On comparing the list of physicians and surgeons of the city as given by the city directory of 1902 with the list contained in the directory of 1901, we find 102 additional names. Each of these 102 persons have been interviewed, either in person or communicated with by circular, and as a result of the information obtained we are enabled to classify them as follows: medical students, 4; graduates of medicine, who failed to pass the examination of the State Board of Medical Examiners, 4; physicians lawfully registered in the county clerk's office, 64; osteopathists, 7; dentists, 9; dental student, 1; persons who had left the city, 5; persons not practising or attempting to practise medicine, 2; United States Marine Hospital Service, 1; electrician, 1; internes in hospital, 2; druggist and chemist, 1; deceased, 1.

We might mention that the censors have called the attention of the parties who have charge of compiling of the city directory to the necessity of care in the classification of physicians

and surgeons, and hope that in the future greater care will be taken in eliminating from the list held out to the public by the city directory as physicians and surgeons the names of those who are not lawfully entitled to be classified as such, to-wit: dentists, chemists and other similar classes.

Your board has also called the attention of the medical graduates who have failed to pass their examinations before the state medical board, to the fact that they were not entitled to practise medicine or make use of the title of Dr., and that until they were enabled to pass such examination they should confine themselves strictly to their studies, which the parties above mentioned as having been classified in the directory as physicians and surgeons have consented to do. Internes in the hospitals who appear in the directory as physicians and surgeons have also been warned of the law regulating the practice of the profession and the necessity of their refraining from illegal practice.

There has also been reported to your board four dermatologists, one optician and five chiropodists who were alleged to be illegally practising medicine or at least illegally making use of the title Dr., in their advertising matter. Each of these parties were interviewed by your board or the chairman thereof, notified of the provisions of the law relating to the practice of medicine and warned that they must take down their signs in which they make use of the term Dr. and cease advertising by such title, which in each instance they promptly did.

Dr. F. Gernell Battner, who is or was associated with Dr. Porter, with offices at 333 Main Street, has been reported as illegally practising medicine. The chairman visited Dr. Battner and warned him of the penalty for such illegal practice and he agreed immediately to cease, which the board believes he has done.

Another case which was reported was that of Dr. Leon Smith, with offices in the Lewis Block at the corner of Swan and Washington Streets. He was called upon and warned that until he was duly registered and lawfully entitled to practise in the city, he must remove his sign and cease to make use of the title Dr. or practice the medical profession in the city. Shortly after he took down his sign and removed from the city.

For the past twelve months, your board has made diligent efforts, in season and out of season, to obtain an indictment against a notorious individual with offices on Main Street in this city, near Chippewa, who has been illegally practising medicine. By means of his extensive advertising in the newspapers and the subterfuge of the employment of duly licensed physicians who were so wanting in a sense of manhood and the dignity of their profession as to prostitute the same to their personal profit, he has been enabled to take advantage of the ignorant and credulous and by means of extravagant promises of wonderful and impossible cures to obtain from them large sums of money in the aggregate. Such a condition of affairs in our city

is not only a menace to the public health but is an insult to the intelligence of the public. The late District Attorney and his staff, either through indifference, want of confidence in the evidence, or for other reasons not known to this board, refused to present to the various grand juries which have met during the past year the facts which we have submitted, or to advise any indictment of said individual, although in the opinion of this board there has been the very strongest possible evidence against him. It is our earnest hope and expectation that the present administration of the District Attorney's office will realize the menace to the public health which such practises involve and the duty which the district attorney and his associates as public officials owe to the public in protecting it from such violations of law.

Dr. C. H. Woodard, a member of this society, with offices at 850 West Avenue, has been reported to the board as guilty of practises which are in violation of the usages of our profession —first, in his manner of advertising, and, second, in dispensing a secret nostrum. We have interviewed Dr. Woodard and called his attention to his methods as being in violation of the ethics of our profession and requested him to desist therefrom. However, he has declined so to do, claiming that he was justified in all his practises. It is unfortunate for our profession that any of its members are so lacking in a sense of the dignity and honor of the profession that they are willing to seem to prostitute it to their personal ends and will even resort to questionable practises to reach the thoughtless and unfortunate. It is probable that there is no legal method to prevent such practises and that our only redress therefor is expulsion of the offender from fellowship in this society.

In conclusion, this board begs to acknowledge its indebtedness to its counsel, Hon. Tracy C. Becker, for valuable assistance rendered to it in the past and would respectfully recommend that he be continued as counsel for the board, and that the board be given authority to employ such detectives and other agents as may be required for the performance of its duties, and to draw upon the treasurer for such reasonable compensation for its counsel and disbursements as the board may approve.

Respectfully submitted,

J. B. Coakley, Chairman.
Irving W. Potter,
Francis E. Fronczak.
H. R. Hopkins.
Henry Lapp.

Dated January 13, 1903.

The report was adopted and on motion the president appointed John H. Grant, C. C. Wyckoff and William Warren Potter a committee to investigate the Woodard case.

The treasurer, Dr. Edward Clark, submitted his annual report, which was referred to an auditing committee, consisting

of Drs. Hourigan and Grant. The committee subsequently reported the accounts of the treasurer to be correct.

On motion of Dr. Callanan, the treasurer was empowered to employ such means as in his discretion may become necessary for the collection of membership dues.

The scientific program was then taken up. Hon. C. D. Davie, of Salamanca, N. Y., Surrogate of Cattaraugus County, read a paper on Medical Expert Testimony (See page 566). The discussion was participated in by Hon. Tracy C. Becker and Clarence M. Bushnell, Esq., on the part of the legal profession and Drs. Floyd S. Crego, Wm. C. Krauss and James W. Putnam on the part of the medical profession.

The attendance numbered over 50 members together with several guests. Among the latter was Dr. A. D. Lake, of Gowanda.

The society at 1.30 p. m. adjourned.

Buffalo Academy of Medicine.

Section on Medicine, January 13, 1903.

Reported by N. L. BURNHAM, M. D., Secretary.

The regular meeting of the section on medicine, of the Buffalo Academy of Medicine, was held at the Academy Rooms, Public Library Building, on Tuesday evening, January 13, 1903, the chairman, Dr. A. E. Woehnert, presiding.

The minutes of the previous meeting were read and approved.

The first paper of the evening was read by Dr. A. J. Colton, entitled,

INFANTILE ECLAMPSIA.

DISCUSSION.

Dr. I. M. Snow had never seen convulsions caused by either phimosis or dentition. He considers gastrointestinal disorders the most common cause. He reported a case of a seven months' old child whom he was called to see, which had a rectal temperature of 109.4° and convulsions. The child was treated with ice, viz.: ice pack, ice cold rectal irrigation, the high temperature being considered the cause of the convulsions. The convulsions ceased with the decline of the temperature. The case proved to be one of syphilitc meningitis.

Dr. C. S. Jones regards intestinal toxemia as the most common cause of infantile convulsions. He reported a case of capillary bronchitis with convulsions in a child six months old. He thinks the toxemia, resulting from the swallowed sputum, the factor in producing convulsions in this case. He considers hot applications in the form of hot moist cloths to feet and legs with cold to the head better than the hot bath in many cases. The child remains in bed and rests.

Dr. F. Thoma reported a case of a child three years of age in perfect health being suddenly seized with convulsions, and although treatment was begun at once, directed particularly toward the gastrointestinal canal, the child died in two hours. He could not make a diagnosis.

Dr. Schroeter had seen cases similar to that of Dr. Thoma's and considers them as due to meningitis. They are difficult to diagnosticate.

Dr. A. L. Benedict regarded intestinal irrigation as an efficient method of treating convulsive seizures in infants, but questions whether the irrigation relieves as a result altogether of toxins removed. We cannot relieve the whole intestinal canal by a single irrigation. May it not be that the convulsive seizure is due to an effort at expulsion on the part of the intestine and the assistance we render by irrigation causes convulsions to cease?

Dr. Colton, in closing the discussion, remarked that he considered the suddenness with which high temperature developed to be a great factor in producing convulsions.

The second paper of the evening was read by Dr. Irving M. Snow, entitled Injuries and infections of newly-born children, to be published at a later day.

Stated Meeting, January 20, 1903.

Reported by F. W. McGuire, M. D., Secretary.

The meeting was called to order by the president, Dr. Herman E. Hayd, at 9 p. m. The minutes of the last stated meeting, held November 3, 1902, were read and approved.

The council recommended the election of Drs. George F. Mills, Edward G. Aldrich and George Armstrong, all of the Buffalo State Hospital. They were duly balloted for and elected members of the Academy.

A communication from the officers of the New York State Nurses' Association, with reference to a bill before the present legislature, regarding the registration of graduate nurses, was read and on motion it was laid over to be considered at a special meeting.

The president appointed Drs. Grover W. Wende, John A. Pettit and William Meisburger, a committee to prepare resolutions regarding the death of Dr. Jacob M. Kraus.

The program of the evening was provided by the pathological section. It consisted of a paper read by Dr. MATTHEW D. MANN, entitled

SURGICAL TREATMENT OF PUERPERAL INFECTION.

The paper was discussed by Drs. Frederick, Van Peyma, Schroeter, O'Gorman and Hayd.

Dr. POHLMAN made a few remarks asking for a report of the committee on St. Mary's Maternity Hospital and Orphan Asylum.

Dr. MARSHALL CLINTON introduced the following resolution:

Resolved, That the Academy will not consider the charges, as it is a society for scientific discussion and not a medical police court.

It was moved as an amendment that the committee be discharged by the Academy. Carried.

Attendance, 48. Adjourned at 10.30 p. m.

ABSTRACTS.

Iron as a Remedy.

Time out of mind (*Medical Mirror*, November, 1902,) iron has been leaned upon, as one of the special standbys in medicine, particularly as a builder and reconstructor. But unless iron be given in proper form, one might as well give absorbent cotton, or chips or wet stones. When we desire to produce any increase in the number of red blood corpuscles, and to make them redder and richer with hemoglobin, we need to be sure of the form of iron that we are giving. The evidence has been accumulating these many years, that manganese, in itself an admirable remedy, combined with iron emphasises the potency of both.

Dr. Gude, the great German chemist, contributed very definitely to the good of the profession, when he presented the product of long years of experimentation and clinical experience, the therapeutic product known as pepto-mangan (Gude).

Added to the many hundreds of clinical contributions, Dr. J. W. Frieser, of Vienna, Austria, recently reports most favorably, and very forcibly, observing as follows:

Pepto-mangan contains iron and manganese combined with peptone in the proper proportions, and in a readily digestible and absorbable form, so that the preparation can be completely utilised by the organism. As is well known, the peptones represent artificial predigested products, which when taken into the organism make no special demands upon the digestive functions, which in anemic and chlorotic persons are usually weakened and impaired in action. This fact is the more important, since in these cases, the digestive process and the secretion of gastric juice is usually reduced, in consequence of which the nutrition is quite impaired, while frequently there is a condition of hyperacidity of the gastric juice. It has been most gratifying to me to observe that during the use of pepto-mangan (Gude), which experience has taught me is particularly adapted in these maladies, it does not interfere with, or exert any disturbing effect upon the digestion. On the contrary, under its administration, the appetite and the digestion are stimulated in a very satisfactory manner.

As a rule, during treatment with pepto-mangan the improvement in the constitution of the blood, as shown by physical examination, was accompanied by a beneficial effect upon the general condition and strength. The appearance and appetite of the patients improved visibly; the digestion and nutrition progressed favorably, and the patient felt better, happier and more vigorous.

Common Sense Tonic Medication, with Illustrative Cases.

Dr. A. W. Duvall, of Philadelphia, publishes an article in the *Medical Examiner and Practitioner*, December, 1902, with the foregoing title, in which he says, every physician of experience has many times felt the need of a satisfactory method of treatment for the exceedingly common class of cases attended with impoverishment of blood, exhaustion of nervous force and the constitutional condition designated malnutrition. It can be safely stated that the ordinarily employed tonics and reconstructives, iron, arsenic, strychnin, cod liver oil, and the like, fail in the majority of cases to

effect the desired results. Reasoning *a priori* it seems that the most rational and scientific method of treating these cases is by fostering the patient's nutritive functions; and this can only be accomplished by directing treatment first to restoring the enfeebled digestive organs, so that food, the natural reconstructive and tissue builder, will be digested and assimilated. This may be said to be the first and most striking indication for treatment, inasmuch as there are always present the symptoms of atonic dyspepsia with loss of appetite, and an absolute inability on the part of the patient to take sufficient nourishment to replace the increased waste of tissue brought about by the disease processes. Most so-called tonic-nutrients and reconstructives have little or no influence upon these most important functions. Iron is administered in anemia because that element is known to be deficient in the blood; the fact that the deficiency of iron and impoverishment of the blood is but a part of a clinical condition, of which general tissue impoverishment—malnutrition—is the essential and underlying feature, seems to be disregarded. Cod liver oil, according to both scientific investigations and practical experience, is of utility only as a food fat; aside from this its therapeautic, *i.e.*, remedial value, is practically *nil*. What is most needed is a tonic, which attacks the pathologic conditions upon the rational scientific basis of restoring tone to the general system—blood, nerves, organs, nutrition, by an imitation of nature's methods of restoring waste of tissue and impoverishment of nervous force, *i.e.*, by coaxing the abrogated digestive and assimilative function—and thereby the general nutrition—to resume normal physiologic activity.

Duvall then reports a number of cases selected at random from a large number of similar ones, which were cited to illustrate the foregoing remarks upon what constitutes both rational and scientific tonic medication. The remedy selected was a mixture of gentian, taraxacum, dilute phosphoric acid, glycerine, with a small amount of sherry wine and carminatives (furnished under the name of Gray's glycerine tonic comp.), all of which ingredients have a well known and universally acknowledged tonic influence upon the digestive and assimilative functions.

The nine cases cited, of diverse natures, suffice to illustrate the statement made that if the various forms of anemia, nervous exhaustion and malnutrition—existing either independently or as a part of constitutional or organic diseases—are to be satisfactorily treated and prompt results expected,

the old time so-called tonics, of which iron, arsenic, strychnin, cod liver oil, and the like, are representatives, must be supplanted by measures which are not only rational and scientific, but which have the approval of extensive and critical clinical experience.

Pregnancy and Labor Following Complete Nephro-Ureterectomy.

Bovee (*Virginia Medical Semimonthly*, December, 1902), relates the case of a woman upon whom he operated March 18, 1901, for pyonephrosis, renal calculi and miliary abscesses in the ureter. She became pregnant the July following and was delivered April 15, 1902, of a male child weighing 10½ pounds, after a labor of six hours' duration. The third day after delivery she complained of intense pain along the course of remaining (left) ureter. This was accompanied by fever ranging from 100° to 102°. The fever declined to normal in about a week, the tenderness over the ureter remaining some time. There were no further complications and the patient was able to nurse her infant, and at the time of the report remained in splendid health. The urine during pregnancy showed albumen and a specimen examined three months later showed it still present, but no casts and with a normal percentage of solid.

Creosote in Pneumonia.

Sanitätsrath Dr. C. S. Sewening, of Werther, Westphalia, states, (*Deutsche Aerztezeitung*, Berlin, October 1, 1902,) that the recent numerous communications regarding the employment of creosotal in pneumonia incite him to publish the good results which he has obtained from the drug in some other affections. Amongst others he recounts a case of catarrhal cystitis occurring in a surveyor who had worked for several years in a wet coal mine, and whose urine formed a thick, mucilaginous deposit in the chamber. He was ordered:

℞ Creosotal ..... 4 grams (1 dram).
Ol. oliv ..... 200 grams (6⅔ ozs).

After he had taken this mixture two or three times a day in tablespoonful doses for eight days, his urine became permanently clear.

Another case was that of a young farmer, who came to him about a year ago complaining of a dirty discoloration of the face, hands, and the like, being in fact, a good picture of Addison's disease. Sewening prescribed for him:

℞ Creosotal ..... 4 grams (1 dram).
Ol. jecor. ..... 200 grams (6⅔ ozs).

directing him to take a teaspoonful of the mixture three times daily. After he had taken the medicine twice the spots disappeared, and they have not returned to this day. The man's general condition, also, is perfectly normal.

Therapeutic Truths.

Mountain air and sea breezes are nature's specifics for hay fever.

Zinc sulphocarbolate, grain one-half, will check vomiting with surprising rapidity.

A large cupful of hot water drank every half-hour persistently, has cured severe cases of delirium tremens.

In the treatment of alcoholic habits, don't forget the necessity for excessive nutrition of some kind easily appropriated.

The compound tincture of benzoin is an admirable remedy for chapped hands, lips, cracked nipples, and the like.

Strychnia is an excellent remedy for uterine hemorrhage from atonicity or inertia. It may be given in advance if such a condition is anticipated.

There is nothing that so promptly cuts short congestion of the lungs, sore throat or rheumatism, as hot water when applied promptly and thoroughly.

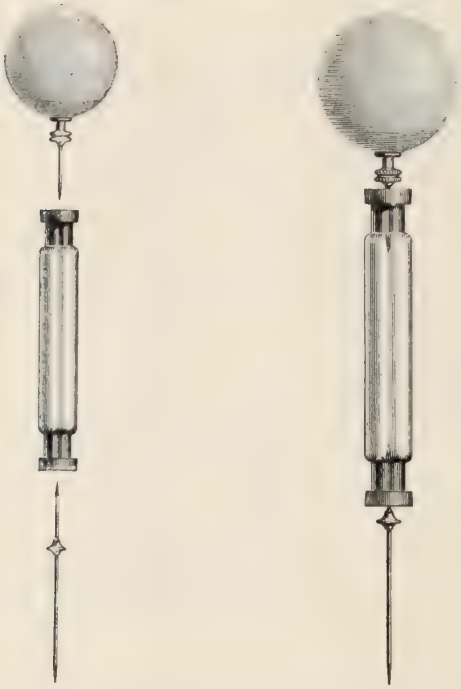
To remove foreign bodies in the ear, dip the end of a camel's hair brush in glue and leave it in position against the body. When dry, after a few hours, pulling upon the brush will remove the whole thing.—*Canadian Practitioner.*

Leukocytosis in Pneumonia.

Lambert and Dale (*St. Paul Med. Jour.*, December, 1902,) say as a means of differential diagnosis, the fact that leukocytosis is the normal condition of the blood in pneumonia is often of great assistance. The leukocytosis will help to rule out malaria, typhoid and typhus fever, and acute tuberculous pneumonia, uncomplicated with influenza and the catarrhal pneumonia of influenza.

NEW INSTRUMENTS.

The Lynch Aseptic Syringe Container.



The above are illustrations of the Lynch aseptic syringe container, an original device for storing and ministering serum, and more particularly diphtheria antitoxin. The barrel of the syringe is filled with serum in the laboratory and aseptically sealed with rubber stoppers. The serum is never again exposed, nor is breakage, with its attendant danger of particles of glass, likely to happen. The needles and rubber bulb (one of each accompanying every dose of serum) are supplied in sterile wrappings, as will be seen by the illustrations; it is only necessary for the physician to pierce the stoppers with the needles to have a perfect hypodermic syringe. A feature of the device is that half of the contents of the container may be administered, when, by withdrawing the needles the apertures in the stoppers will close, keeping the remaining serum intact and sterile.

Dr. H. M. Alexander & Co. have adopted this device as a carrier for their diphtheria antitoxin, which is also supplied by Messrs. John Wyeth & Bro., as authorised general distributors.

CORRESPONDENCE.

A Suggestion for the Establishment of a Physicians' Club.

Editor Buffalo Medical Journal:

SIR: The spirit of *camaraderie* is none too well developed in the medical profession. Much of this condition would undergo a change for the better if the opportunities for social meetings of physicians were more frequent. At a recent meeting of the Medical Society of the County of Erie a member of the legal profession, who participated in the discussion, voiced his opinion of some of the shortcomings of the members of the medical profession. As physicians we need, I think, to get more in touch with each other and thus would we learn to know one another better and develop a more becoming fellowship. How can this be brought about?

During the enjoyable reception given by Dr. Crego, February 4, in honor of Dr. Hall, the undersigned, from more than a score of gentlemen present, received a hearty response to the suggestion of the formation of a physicians' club. Such clubs exist in other cities and Philadelphia boasts of a very flourishing one of over 500 members. A number of good reasons might be presented for the establishment of such a club among the physicians of Buffalo, but this communication is merely a suggestion. Many reputable physicians are not eligible for membership in the University Club, on account of its exclusive requirements—the degree of A. B., or its equivalent being necessary. For many, the other prominent clubs are too expensive. What say you? If you favor the formation of such a club, please communicate with Dr. William Warren Potter, the editor of this JOURNAL, or the undersigned.

BENJAMIN H. GROVE.

334 PEARL STREET, February 17, 1903.

H. CAMPBELL THOMSON corroborates Lauder Brunton's observations (*British Med. Jour.*) on the use of alkalies for the relief of pain in neuralgia and other peripheral nerve lesions. In a severe and obstinate neuralgia great relief was experienced from an alkaline mixture of which ammonium carbonate was the principal ingredient.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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The Medical Society of the State of New York.

THE 97th annual meeting of this society, held at Albany, January 27, 28 and 29, 1903, was from every viewpoint a most satisfactory medical gathering. In the number that attended, in the quality of the papers read, in the official reports presented, it was everything to be desired. The president, Dr. Henry Reed Hopkins, of Buffalo, has abundant reason to be satisfied with his own labors as well as with the work of his business committee and other coadjutors, which culminated in such a splendid result.

The president's inaugural address dealt with several items of particular interest, two of which claim attention as of great, if not paramount importance. Dr. Hopkins's suggestion that public health officers be trained in sanitary science and that the instruction shall be of such a nature as to lead up to the degree of Doctor of Public Health, to be conferred by the regents of the University upon examination, is one that appeals to every educator and especially to every physician as being in keeping with the progress of the century. This is a question that ought not to admit of two opinions concerning its rightful propriety.

The other recommendation of the president—namely, that the society consider the propriety of taking steps looking to the proper observance of its centenary which is approaching, was approved. The president was authorised to appoint a committee which should deliberate upon the feasibility of appropriately celebrating the event and report its suggestions at the annual meeting in 1904. The committee is constituted as follows: chairman, D. B. St. John Roosa, of New York; vice-chairmen, A. Jacobi, New York, and A. Vander Veer, Albany; representing 1st district, Daniel Lewis, New York; 2d district,

George Ryerson Fowler, Brooklyn; 3d district, W. G. Macdonald, Albany; 4th district, Charles Stover, Amsterdam; 5th district, Henry L. Elsner, Syracuse; 6th district, Hamilton D. Wey, Elmira; 7th district, William S. Ely, Rochester; 8th district, William Warren Potter, Buffalo.

The duties of this committee are important, and its work should be conducted upon a liberal basis. It will cost some money to celebrate properly the event in question and the society should exhibit a willingness to defray the expenses, which no doubt will be the case. But we shall have occasion to speak upon this subject again, hence will not consider details at present.

The president advocated the state licensing of nurses, spoke of the progress making in the establishment of a state hospital for consumptives, and made appropriate reference to the work of the committee appointed last year to promote a resumption of relations with the American Medical Association.

The committee on hygiene, by its chairman, John L. Heffron, of Syracuse, made an excellent report, dealing in part with the prevention of communicable diseases, and proposing improvement in the tenement house law.

The committee to formulate a plan of reorganisation of the profession, in order to effect affiliation with the American Medical Association, of which Dr. Henry L. Elsner is chairman, made an elaborate report in which it stated that as yet it had been unable to come to an understanding with the other societies interested, but it reported progress and asked to be continued. The committee was empowered to proceed with its work for another year.

The program was full of important material and occupied the society most industriously for six sessions. Two symposiums, one on hematology, and the other on arteriosclerosis, attracted great attention and deep interest. The latter deserves more extended comment than we are able to give in this place, because of the influence it will exert in the etiology, pathology and treatment of this condition.

Dr. Charles A. L. Reed, of Cincinnati, delivered an oration on the life and character of Rudolph Virchow, which is a model of rhetorical and biographical eulogium. We shall print it in a future number of the JOURNAL.

The president's anniversary address was a plea for Progress, Unity and Liberty, the underlying thought of which was fealty

to the law as the only safety of citizenship, the responsibility of the physician being greater in this respect because of his education; that unity could only come through such fealty, and, finally, that true progress could only be made through the liberty that unity would ensure. It is printed in full in the JOURNAL for February.

The annual banquet at The Ten Eyck was a social climax to an intellectual feast that had been in progress for two days. The 400 banqueters were joyous in the atmosphere of music, song and speech. The event of the evening was the address of Hon. J. Sloat Fassett, the subject of which was The Empire State and the Twentieth Century. Rarely does a post-prandial effort meet with such a reception and still more rarely have such speeches been as worthy of approval. His lofty thoughts, clothed in finished rhetoric, and accentuated with graceful gesticulations were worthy the man and the occasion. Mr. Fassett deserves the thanks of every doctor who heard him, for his brilliant word-painting of a magnificent subject.

The officers elected were: *President*, A. T. Bristow, of Brooklyn; *Vice-President*, Edward B. Angell, of Rochester; *Secretary*, Frederic C. Curtis, of Albany; *Treasurer*, O. D. Ball, of Albany.

The Code of Ethics.

IN A very practical and sensible commentary upon the code of medical ethics, the *Mississippi Medical Record*, February, 1903, says:

Professional Ethics vs. Commercialism is the text from which Dr. Gillmore, of Chicago, in the *Journal of the American Medical Association*, January 3, preaches a discourse that cannot but be depressing to the young men into whose hands it may fall. The doctor tells of one or two instances in which he has been treated in a most unethical manner by professional brethren, touches on irregular methods employed by physicians with more ambition than sense of decency and concludes with the suggestion that medical students shall be educated in ethics while at college.

When our code of ethics was written the country was controlled by an aristocracy. Say what they might about all men being born "free and equal," and no greater falsehood was ever put in print, there was then an aristocracy of wealth and learning that controlled affairs far more than is the case today. The learned professions as they were called, "Law, Medicine and Divinity," were in the hands of this aristocracy and our code is

one of the greatest proofs of this fact. It necessarily follows that it cannot serve to meet the conditions we now face. Indeed, it is doubtful if any code will completely answer all requirements, for while the physician of gentlemanly instincts needs no written law to direct him in keeping his hands clean, the boor will ride roughshod over everything that lies between himself and the almighty dollar. As an example: the writer knows a physician who has probably not seen a copy of the code in a quarter of a century, and yet it is a positive pleasure to note the careful courtesy with which he treats his consultants and the high moral stand he takes in the conduct of his professional affairs—he is a gentleman by instinct. On the other hand we can cite an instance of a man whose mouth fairly reeks with quotations from the code and who never misses an opportunity to decry his brother physicians. There are probably few of us who cannot furnish similar illustrations from personal experience.

The *Record* does not think that the method advocated by Dr. Gillmore will prove an adequate remedy for the evil complained. Continuing the editorial says:

We believe we must get nearer the root of the matter. By insisting on a higher standard of educational requirements for entrance to our medical colleges we will get a better class of men—men who are not only from such environment as instils into them a sense of decency, but also who, being better prepared, can become better equipped mentally and will not be so readily tempted from ethical paths.

In the last paragraph quoted the *Record* makes an important suggestion of relief, which will do much toward meeting the difficulty. When the doctrine of state control is accepted and carried out loyally by medical schools, commonwealths and the profession in general, the question of medical ethics will be met as far as it can be by any written law or rule.

It is through education that ethical progress must be made and not through edicts pronounced, *ex cathedra*, with a top-lofty flourish or trumpet-like blare. A uniformity in standards of requirements for admission to medical schools, a similarity in length of terms and teaching methods, and a final examination by the state is the trinity that will overcome ethical paradoxes and establish reciprocity in licensure.

Expert Testimony.

THE meeting of the Medical Society of the County of Erie in January was of unusual importance. At that time the bench and the bar and the medical profession met to discuss the question which concerned all—medical expert testimony.

Judge Davie presented in a very able paper the faults and the merits of the present system of the employment of experts. He quoted from the opinions of different judges to show into what disrepute experts have fallen.

None of the quotations were more serious in their charges of bias than the opinion of Judge Davis, of the Supreme Court of Maine, in the Neil case:

If there is any kind of testimony that is not only of no value, but even worse than that, it is, in my judgment, that of medical experts. They may be able to state the diagnosis of a case more learnedly, but upon the questions whether it had at a given time reached a stage that the subject of it was incapable of making a contract or was irresponsible for his acts, the opinions of his neighbors, of men of good common sense, would be worth more than that of all the experts in the country.

The opinion of Lord Kenyon, is also important when he said:

Skilled witnesses come with such a bias on their minds to support the cause in which they are embarked that hardly any weight should be given their evidence.

The question of expert testimony is one which is most difficult to solve. Questions are constantly arising in the courts which can only be settled by expert opinions, and yet expert opinions cannot always be relied upon.

Expert opinions continually differ. In our judgment, experts in any field of thought will differ. They will differ in law as the decisions of the Court of Appeals will show. They will differ in matters of religion, politics and finance. They will necessarily differ on medical questions.

Nevertheless, we believe that experts would differ less frequently if they were given all the facts in a case, instead of a few well and skilfully chosen facts incorporated in a hypothetical question. Another cause, which can be eliminated, is entirely in the hands of the attorneys. If they really wish an honest opinion as to the merits of the case let them select men of acknowledged ability and reputation. Let them pursue this course instead of that other course, which is far too common, of seeking men who will testify to anything that may be desired.

We know of cases in which an attorney has brought the plaintiff to a physician's office and requested an examination. Upon that physician's report that the examination revealed only slight and temporary injuries, the attorney chose other, perhaps less skilful and less honest men, who swore stoutly to the incurable nature of the malady.

Such meetings as the one held by the Medical Society of the County of Erie are of value. It is important that lawyers and physicians should meet and discuss public questions which affect both professions and which affect the public. Let the leaders of both professions strive to devise a way which will make expert testimony important and not a commodity which can be bought and sold. We hope that the day may come when it will be permissible for a physician to testify that he examined the evidence and came to such an opinion, based upon the sworn testimony and upon the personal examination of the plaintiff or prisoner, as the case may be; that after he has given his opinion the expert should be asked how such an opinion is formed and that he be subjected to a rigid cross-examination. Such a method would avoid the use of the hypothetical question which never presents the truth, the whole truth, and nothing but the truth.

Drug Substitution Again.

WE HAVE called attention to the evil of substitution in physicians' prescriptions on several and divers occasions in these columns, but it will do no harm to mention the subject again, because it is a practice that is hard to overcome.

Very recently (January 24, 1903,) *The Medical News*, in an editorial discussion of this subject said:

Commissioner Lederle [of the New York Board of Health] has set in operation a wholesale examination of the stuff that is commonly sold as phenacetin. His physicians and staff have purchased phenacetin powders from 373 drug stores, in Manhattan and Brooklyn. The official report gives the names of all, and includes many well-known drug stores, and department stores. Among these samples, only 58 were found to be pure phenacetin, while the greater number, 315, were adulterated. The chief adulterant was found to be acetanilid, selected undoubtedly because of its cheapness, and its similar effects, in part, to phenacetin.

This would seem almost apocryphal if it were not officially authenticated.

The New York College of Pharmacy has taken action recently on this question in the following terms:

WHEREAS, The substitution of one article when another is called for or of an article of one brand when that of another is ordered, involves an act of deception and an abuse of the con-

fidence of physician or patient, and an act of injustice toward the manufacturer of the article so specified, and,

WHEREAS, The general commission of such acts is destructive of those mutual relations of confidence between manufacturer, pharmacist, physician and patient upon which the highest success of medical practice depends, and,

WHEREAS, Such practises appear to be increasing at the present time, and threatening serious professional and commercial difficulties, therefore, it is

Resolved, That the College of Pharmacy of the City of New York publicly condemns all acts of substitution whether in prescription work or in ordinary trade; that it declares such practices to be violations of just dealing, opposed to the principles of professional ethics and subversive of good morals, and it is further

Resolved, That we exert our utmost influence both as individuals and as an institution, to discourage such practices and to promote professional and commercial confidence.

It may be noted, as a further point of interest relating to this subject, that Messrs. Farchild Bros. & Foster, of New York, have secured a final decree enjoining Matilda Eberhardt, August F. Eberhardt and John H. Eberhardt, who conduct a drug store at 622 Third Avenue, New York, from selling or dispensing substitutes for Fairchild's essence of pepsine. The injunction carries with it costs for $42.72, together with an extra allowance of $250. This makes it an expensive luxury to indulge in the nefarious practice of substitution, and it is to be hoped that all dishonest druggists will take warning from this most upright decision.

We trust our readers will pay heed to this important matter, and, if need be, interest themselves sufficiently to promote efficient legislation that will prevent a continuance of the evil practice of drug substitution.

The Regents, the Superintendent of Education and the Merritt Bill.

IT IS important that those pupils not residing in high school districts should have equal opportunities for education with those who live within the jurisdiction of secondary instruction. The Merritt bill proposes that the state shall pay for the tuition in high schools of those who desire to avail themselves of that privilege and are not now entitled without payment of tuition fees. It is highly important that any moneys appropriated for such purpose shall be disbursed without any taint of partisanship. It follows as a logical sequence that any such appropria-

tion should be distributed through the regents in order to reach the end desired with economy, and with impartial benefit to those who for whom intended. There can be no two opinions concerning these two points.

It is unfortunate that we have a dual responsibility at Albany regarding our educational system. It leads to misfits, to friction, to acrimony, and it should be changed without delay. The legislature can do it if it will and there is no doubt the governor would approve the unification of the state educational system. One responsible head for all our departments has been the advice, even the policy, of Governor Odell, and we have seen abundant proof that he is a consistent man.

The address of the regents to the governor, the legislature, and the people outlines a plan that is so simple, so complete, so just, and, withal, so needful, that we can discover no objection to its prompt adoption, and we look to the legislature to grant the petition on its part, since it must take the initiative.

Every physician is interested in the perfection of our educational methods and the administration of the whole system upon a non-partisan basis. We hope our readers who reside in this state will manifest a practical interest in the matter, and take it up with those members of the legislature whom they happen to know. A prompt free discussion of the subject is what is needed; with this once had there ought to be no difficulty in settling the vexed question, on a foundation that would remove our public schools from the arena of partisan politics, and keep them in safe hands for all time.

The Trained Nurse and Hospital Review for January gives a very interesting account of the graduation of the first class of nurses from the Mercedes Hospital School for Nurses at Havana, Cuba, November 8, 1902. Seven nurses were given their diplomas. President Palma and other government officials were present, the nurses receiving their diplomas and badges from the hands of the president.

It is reported upon authority that Ithaca is invaded with a typhoid epidemic; that on February 7 some 400 cases had appeared. The last census credited the city with a population of 13,136, hence there is a proportion of nearly 33 cases of fever to 1,000 of population. It would seem that such a condition

ought to be impossible at this period, when the methods of the propagation of this disease are so well understood, and when, too, the ways of prevention are so clear.

The water supply of this scourged university town should be purged of its infection at once, no matter at what cost, and everything should be put in the highest sanitary condition. Students are reported to be leaving the university by hundreds, which is but natural. It is stated that the university authorities demand that the Waterworks Company shall construct a new system. The university owns $100,000 worth of the bonds of the company and is anxious to undertake the financiering of the improvements, which will cost about $150,000. Delay in the matter will be criminal.

To reopen the case of the assassin of President McKinley, with reference to a discussion of his mental condition, is neither wise nor profitable. The case was closed by the courts a year and a half ago, and any further discussion of it can but serve again to invite attention to an abhorrent chapter in American history that had better be closed forever. Let the memory of the great President remain with us as a sweet example, but let his assassin remain in that oblivion to which his diabolical act very properly consigned him!

The Public Health and Marine Hospital Service of the United States is taking appropriate action in regard to the plague invasion of the Pacific coast. The conference of the several state boards of health at Washington in January, under the auspices of Surgeon-General Wyman, produced a good effect. The authorities of California have learned the importance of frankness in dealing with the question, and the energetic action of the Mexican National Board of Health has resulted in an appreciable abatement of the epidemic of Mazatlan. The United States Consul at that port has advised the Washington government that there had been a total number of cases, to February 1, of 260, with 200 deaths.

PERSONAL.

Dr. Frederick Preiss, of Buffalo, who has been ill for several weeks with typhoid fever, is sojourning in Florida during his convalescence, whither he went about the middle of February.

Dr. Marshall Clinton, of 466 Franklin Street, Buffalo, has been appointed attending surgeon at the Buffalo Hospital of the Sisters of Charity.

Dr. Eugene Smith, of Detroit, read a paper before the Buffalo Ophthalmological Club, Thursday evening, February 12, 1903, on Improved methods of cataract extraction.

Dr. DeWitt G. Wilcox, of Buffalo, was re-elected secretary of the Homeopathic Medical Society of the State of New York, during its recent annual meeting at Albany.

Dr. E. G. Danser, of Buffalo, county medical examiner, who has been quite ill recently, has fully recovered and has resumed both his official duties and his professional practice.

Dr. George T. Moseley, of Buffalo, was nominated to the regents as a state medical examiner at the recent annual meeting of the Homeopathic Medical Society of the State of New York.

Dr. Floyd S. Crego, of Buffalo, gave a reception to Dr. Winfield Scott Hall, of the Northwestern University, Chicago, at the Buffalo Club, Wednesday, February 4, 1903, at 4 o'clock. It was numerously attended by physicians and others, and was an enjoyable gathering of representative men.

Hon. St. Clair McKelway, editor of the *Brooklyn Eagle*, has resigned as a regent of the university of the State of New York, on account of ill health, or as he states it: "I take this step with sincere regret after more than twenty years of unsparing service. The reasons moving me concern entirely conditions of health, which admonish me to reduce the demands outside of my profession upon my strength and time. Happily, the board is now so well organised, and so harmonious and effective in its work, that my retirement can adversely affect neither the policy, nor the success, nor the influence of the body as the constitutional trustee of the state for advanced education."

Commenting upon the subject, *The Tribune* of February 18, 1903, says:

The resignation of Mr. St. Clair McKelway, editor of the *Brooklyn Eagle*, from the State Board of Regents will be widely regretted. After twenty years of active, sagacious and loyal service in that capacity, Mr. McKelway is constrained to retire

solely because a recent illness, though he has happily recovered, has warned him that he must hereafter devote less time and strength to labors outside of his newspaper office. His colleagues, who urged him to reconsider his decision if he conscientiously could, will greatly miss him, and the public loss is serious. But it is gratifying to know that through his journal he will continue to be a wise counsellor in all matters relating to the schools.

LATER—Since the foregoing was reduced to type, Regent McKelway has reconsidered his action and withdrawn his resignation.

In a letter to the Governor, Mr. McKelway stated that his physician had advised him that after a rest he would be able to continue his work, and that having been pressed by many friends not to withdraw from the Board of Regents, he had decided to remain. Governor Odell immediately issued a statement reciting the facts and closing with the following paragraph, with which every person interested in the cause of education will concur:

Mr. McKelway's services have been so valuable to the regents and to the cause of education generally, that I am sure everyone will join in the desire of his colleagues and educators throughout the state that he retain his membership on the board, and I think the state is to be congratulated upon the fact that he will be able to resume his duties as a regent and upon his determination to recall his letter of resignation.

DR. WINFIELD SCOTT HALL, of Chicago, dean of the medical department of Northwestern University, was the special speaker at the annual banquet of the Alpha Omega Delta fraternity of the University, held at the Broezel House, Wednesday evening, February 4, 1903. His subject was "Educational Ideals in Medicine."

DR. E. L. FROST, of Buffalo, has been appointed physician to the Erie County Penitentiary by the board of supervisors.

DR. PRESCOTT LEBRETON, of Buffalo, has been appointed by the boad of supervisors physician to the Erie County Jail.

DR. ALVAH H. DOTY, of New York, has been reappointed health officer of that port, and his confirmation by the Senate followed with promptitude. This appointment is for a third term, and speaks well for the efficient management of Dr. Doty during his two previous terms.

OBITUARY.

DR. HERMAN MYNTER, of Buffalo, died at his home, 466 Delaware Avenue, February 9, 1903, of arterio-sclerosis, aged 57 years. His last illness was about two weeks in duration, though he had suffered more or less for nearly eighteen months. He made a tour in Europe during the summer of 1902, which

HERMAN MYNTER, M. D.—1845-1903.

From the ILLUSTRATED BUFFALO EXPRESS.
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seemed to benefit him, and on his return he resumed and continued at his professional work until within a fortnight of his death.

Herman Mynter was born in Karebaek, Denmark, took the university degrees at Copenhagen in 1871, served in the medical corps of the Danish navy about two years, and in the army

one year, in compliance with the laws of his native land. He came to America in 1875, and immediately located in Buffalo, where he continued to practise his profession until his last illness.

Dr. Mynter was a surgeon of repute, and was appointed professor of surgery in Niagara University when the institution was organised. After that medical school was discontinued he became clinical professor of surgery at the University of Buffalo. He was attending surgeon at the Sisters of Charity Hospital, at the German Deaconess's Home, and at the German Hospital. In 1879 he became one of the owners of the BUFFALO MEDICAL JOURNAL, and was one of the editors for a few years. He assisted at the operation upon President McKinley at the emergency hospital on the Pan-American Exposition grounds, and continued as one of the attending staff during the remaining days of the President's life. He was a member of the Saturn and University Clubs, of the Medical Society of the State of New York, of the Medical Society of the County of Erie, and of the Buffalo Academy of Medicine.

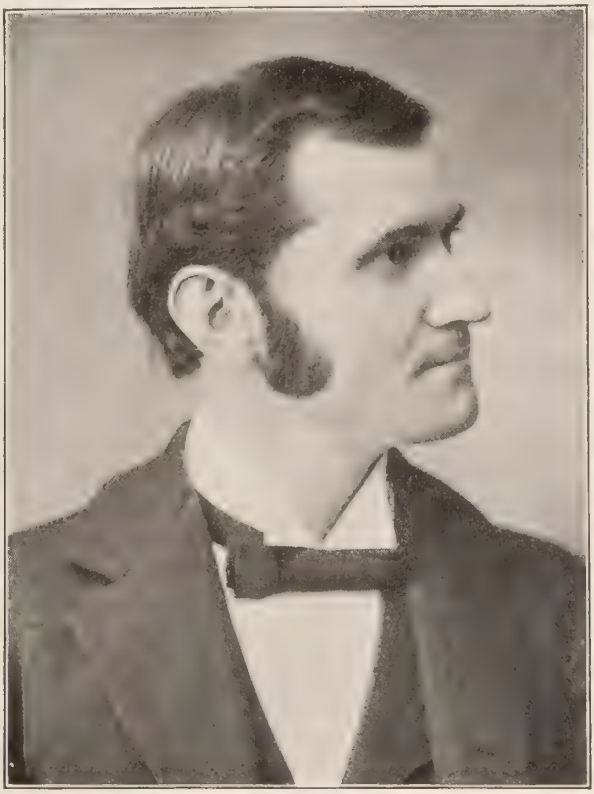
The Medical Society of the County of Erie and the Board of Directors of the German Hospital passed appropriate resolutions in Dr. Mynter's memory. These will be published in a future issue of the JOURNAL.

Dr. Mynter was twice married, his first wife having died a few years after marriage, leaving two daughters. In 1887 he married Miss Harriet Martin Buell. He is survived by his widow and two daughters, Agnes and Emily. His funeral was largely attended from his home on Wednesday, February 11, and the interment was at Forest Lawn.

Dr. Mynter was the author of a monograph on Appendicitis, and occasionally contributed articles to this and other journals. He was a man of strong individuality, was well esteemed by his professional colleagues, and had a large circle of friends throughout the city and Western New York.

DR. WILLIAM E. B. DAVIS, of Birmingham, Ala., was killed at a railway crossing in that city February 24, 1903, presumably in attending to his professional work, though the JOURNAL is in ignorance of the details of the accident. This tragic news has caused a shock to the medical profession throughout the North American continent, greater than any similar event in years, for it is doubtful if any physician forty years old was as well

known throughout the length and breadth of the land as this brilliant young surgeon. It is difficult to express appropriately or in fitting terms the deep sense of sorrow that fifteen years of intimate friendship engender, while we are yet enveloped in the pall of the awful tragedy that so mercilessly swept our friend into the realms of the hereafter. And it is even more



WILLIAM E. B. DAVIS, M.D., 1863-1903.

difficult to justly estimate the great virtues of a character so strong, so sweet, and so altogether lovely as was that of him on whose passing bier we lay this garland of affection.

William Elias Brownlee Davis, was born at Trussville, Jefferson County, Ala., November 25, 1863. His father was Dr. Elias Davis and his grandfather was Dr. Daniel Davis, both physicians of repute. He received his preliminary education at Trussville, studied medicine with his brother, Dr. John

D. S. Davis, and received his doctorate degree at Bellevue Hospital Medical College in 1884. He became the partner of his brother after graduation and so continued until his death. He spent a period in medical study in Europe soon after graduation, and on his return to Birmingham began his life work in the field of gynecology. He organised the Southern Surgical and Gynecological Association in 1888, and served as its secretary until 1900. He was elected president in 1901, and presided at the last meeting of the association, held at Cincinnati, in November, 1902.

Dr. Davis has been active in the professional councils of the State of Alabama and of the Nation for fifteen years. Besides membership in city, county, and state medical societies he has served as secretary and chairman of the surgical section of the American Medical Association, and has also been a vice-president (1893) and a member of the judicial council in that association; he was an honorary president of the section on abdominal surgery and gynecology in the First Pan-American Medical Congress (1893), and vice-president of the second congress (1896); he was a Fellow of the American Association of Obstetricians and Gynecologists and served as its president in 1901; he also served as president of the Tri-state Medical Association of Alabama, Georgia and Tennessee in 1891, and was an honorary member of the Medical Society of the State of New York.

Besides his membership in these and other medical organisations, Dr. Davis was professor of gynecology and abdominal surgery in the Birmingham Medical College, and for several years he was surgeon to the Birmingham Hospital of United Charities. Also, in association with his brother, he has conducted one of the largest and most successful private infirmaries in the South, for the treatment of surgical and gynecological patients. The Drs. Davis edited the first medical journal ever published in Alabama, which was then called the *Alabama Medical and Surgical Journal* and is now the *Alabama Medical Journal*.

Dr. Davis was a surgeon of original methods, advanced thought, and skilful technic. He was an acknowledged authority on the surgery of the liver, gall-bladder and ducts, and expected to publish a work embracing that field at an early day. He has conducted experiments for years upon these and similar subjects; his practice was exacting, and his patients in large numbers were drawn from the far distant regions of the South, being attracted by his superior skill and judgment. He and his

brother were like one man with four hands at the operating table, it being rarely necessary to speak a word to each other, each having such a complete understanding of the other's technic and wishes.

In all that goes to make a resourceful, skilful and successful surgeon, Dr. Davis was specially gifted; he was at once modest, firm, gentle, sympathetic and, withal, so strong in his convictions of duty, and knew so well what to do, that it would be difficult to say that any man was his superior as an operator, or more endowed with that kind of judgment which often creates success in the midst of defeat, that wrings victory from disaster, and which gives an assurance of confidence in the face of what would seem utter hopelessness to many.

Taken hence in the midst of his greatest usefulness, in the mid-noon of a well-equipped manhood, it is difficult to say what this young man of forty summers would have accomplished had he been permitted to live out the full period of life expectation; but it is quite true that he has accomplished as much in his short life as most men do in a third longer time, and that it would have been next to impossible to achieve a higher claim to lasting renown had he lived to be eighty.

Among other accomplishments Dr. Davis was gifted as a speaker; his arguments were logical, his manner forceful, and his rhetoric sometimes ornate. Those who heard his eloquent after-dinner speech at the banquet of the American Association of Obstetricians and Gynecologists, at Washington last September, will not soon forget it.

Dr. Davis was married in August, 1897, and came to Niagara Falls and Buffalo with his charming bride, finally going East for the completion of the honeymoon journey. The surviving relatives are the widow, two sweet little girl children, and a brother, hereinbefore referred to, all of whom receive the assured sympathy of a multitude of warm personal friends throughout the whole country.

Dr. John Homans, of Boston, died at his home in that city, February 7, 1903, aged 65 years. He graduated from Harvard College in 1858 and took his doctorate from Harvard Medical School in 1862. He was commissioned an assistant surgeon in the United States navy in 1862, and later in the same year he obtained the same rank in the army and rose to the rank of surgeon-in-chief of the first division of the 19th army corps,

ultimately becoming medical inspector on the staff of General Sheridan.

Dr. Homans achieved fame as a surgeon in civil life, serving for many years on the staff of the Massachusetts Hospital, and as a teacher in Harvard Medical School. He was a member of the American Surgical Association and a Companion of the Military Order of the Loyal Legion of the United States.

Professor Max Sänger, of Prague, died at his home, January 12, 1903, aged 50 years. This distinguished gynecologist was born at Bayreuth in 1853, and began his professional career in 1878, when he was appointed assistant to Credé. Professor Sänger was the author of a monograph on Cesarean section, for which he devised a special method of suturing the uterus. He also wrote about 150 articles on tumors, plastic operations, abdominal section, retrodisplacements, and other subjects. He was a pioneer of vaginal hysterectomy in Germany, performing the operation for the first time in 1881, and he was a strong advocate of aseptic and antiseptic methods in gynecological and obstetric surgery. In 1899 he succeeded Rosthorn in the chair of gynecology at the University of Prague. He was an honorary Fellow of the American Association of Obstetricians and Gynecologists.

Dr. David H. Reed, U. of B. '83, of Remsen, N. Y., died at his home January 9, 1903, after a long illness, aged 48 years.

Dr. George D. Slocum, of Marine City, Mich., U. of B. '61, died recently at his home, aged 62 years.

Dr. Tousley B. Lewis, of New York, U. of B. '79, died at his home No. 46 West 93d Street, February 8, 1903. The remains were removed to Albion for interment.

SOCIETY MEETINGS.

The Fourteenth International Medical Congress will be held this year in Madrid, from April 23 to 30, and as usual a number of physicians accompanied by their families are planning to attend the meeting.

It is therefore thought that it would be of advantage to arrange a number of conducted tours from this country to and from Madrid, as in this way better accommodations can be obtained at reduced prices, besides which, those participating can choose the routes which will enable them to visit the different parts of the Continent that they are desirous of seeing. For this reason four routes have been planned. For particulars address Dr. Ramon Guiteras, 75 W. 55th Street, New York, or Dr. Charles Wood Fassett, St. Joseph, Mo.

THE Western Ophthalmologic and Oto-laryngologic Association will hold its eighth annual meeting at Indianapolis, Ind., April 9, 10 and 11, 1903. Dr. William L. Ballenger, of Chicago, is the president, and Dr. Derrick T. Vail, of Cincinnati, is the secretary.

THE Buffalo Academy of Medicine held meetings during the months of January and February as follows:

Section on Obstetrics and Gynecology.—Tuesday evening, January 27. Program: Diagnosis of exceptional conditions in labor, Stephen Y. Howell. Report of anomalous cases, Henry G. Bentz. Ancient gynecology, Henry D. Ingraham.

Tuesday evening, February 24. Program: Deformities of the female pelvis, P. W. Van Peyma.

Section on Surgery.—Tuesday evening, February 3. Program: Poisonings by corrosives, Eli H. Long. Bone aneurism, Harvey R. Gaylord.

Section on Medicine.—Tuesday evening, February 10. Program: Hodgkin's disease, DeWitt H. Sherman, Harvey R. Gaylord. Stimulation, Eli H. Long.

Section on Pathology.—Tuesday evening, February 17. Program: Pathological indications for the induction of premature labor and accouchement forcé, and the consideration of the most available methods of bringing them about, J. Whitridge Williams, Professor of Obstetrics, Johns Hopkins University, Baltimore.

THE American Medico-Psychological Association having become affiliated with the Congress of American Physicians and Surgeons, it is obligatory under the constitution and by-

laws of the congress that the association hold its meeting in 1903 and every third year at Washington. The congress has therefore instructed the secretary to issue a notice, changing the place of meeting from Providence to Washington, and fixing the dates, May 12, 13, 14 and 15, 1903.

The Medical Society of the Missouri Valley will hold its Spring meeting at Council Bluffs, Iowa, on Thursday and Friday, March 19 and 20, 1903. The membership of the society includes the representative men of Iowa, Nebraska, Missouri, Kansas, North and South Dakota, and the meetings are always interesting and profitable to those who attend. A feature of the first day's session will be a symposium on syphilis, and on the second day a symposium on Typhoid fever will be presented. A cordial invitation is extended to the profession. Dr. J. M. Barstow, of Council Bluffs, Ia., is the president, and Dr. Chas. Wood Fassett, of St. Joseph, Mo., is the Secretary.

COLLEGE AND HOSPITAL NOTES.

The laboratory plans for the Rockefeller Institute for Medical Research have been announced. It is to be located in New York and the scheme contemplates a single laboratory building, arranged to permit of such extension as the growth of the work may demand. Professor Simon Flexner, of Philadelphia, will have charge of the work as director, and there will be directors of the different departments—namely, physiological chemistry, hygiene and preventive medicine, pharmacology and therapeutics, normal and pathological physiology, and bacteriology. The work on the laboratory building will commence at once.

In order to ally the research work of the institute closely with practical medicine, it is the purpose of the directors to erect in the near future a hospital where special groups of patients may be treated, as it is one of the functions of the institute not only to discover the causes of disease, but to develop new methods of treatment. This hospital will not be large, but will be fully equipped, so that the best possible care can be given to the special cases under treatment. Plans for this new building are already under consideration, and it is expected that the first laboratory will be ready for work by October, 1904.

THE Buffalo General Hospital has received recently two generous gifts. Mr. Frank H. Goodyear has donated $50,000 and Mr. William Hamlin has sent a check of $49,900. The trustees have raised $25,750 among themselves and the public is asked to subscribe $74,350, in order to make a total of $200,000, the amount which the hospital trustees say they need.

In an address to the public the trustees say there is a mortgage for $50,000, a floating debt of $88,000, necessary improvements to buildings will cost $12,000, and $40,000 is needed for a hospital for infectious diseases. Subscriptions, large or small, should be sent to Charles R. Wilson, treasurer, 4 White Building, Buffalo.

BOOK REVIEWS.

A TEXTBOOK OF THE SCIENCE AND ART OF OBSTETRICS. By HENRY J. GARRIGUES, A. M., M. D., Consulting Obsteric Surgeon to the New York Maternity Hospital; Gynecologist to St. Mark's Hospital. Octavo, pp. 874. 504 illustrations. Philadelphia and London: J. B. Lippincott Co. 1902.

This work is divided into two grand divisions,—normal and abnormal. In the normal division, the first part, consisting of six chapters, is termed the foundation. In the second part—twenty-eight chapters—normal pregnancy is described. In the third part—ten chapters—normal labor is dealt with and in the fourth part—six chapters again—normal puerpery is considered.

Coming now to the second grand division, we find the abnormalities treated,—in the first part abnormal pregnancy in eleven chapters; in the second part abnormal labor in eighteen chapters; in the third part obstetric operations in seventeen chapters; in the fourth part abnormal puerpery in nine chapters; in the fifth part notes on diseases of newborn children in fifteen chapters. This gives the general scheme of the treatise, which is novel, practical, and scientific.

The author takes up every condition, from puberty in the first chapter, to sudden death of the newborn child in the last, and discusses them in detail, but with a conciseness that yet sacrifices nothing to scientific accuracy. Garrigues is first of all scientific, then reduces the science to the practical, and finally divests it of ultra scientific dryness before it goes to the press. In the plan of his book it will be observed that he begins with the simple, passes on to the complicated, and ends with the difficult,—a most admirable basis that appeals alike to student, junior practitioner, and advanced obstetrician.

The author very justly declares that during the past 25 years but four really great improvements in the practice of obstetrics have been made, and these he asserts are antisepsis with its

resultant principle—asepsis, the axis-traction forceps, the improved Cesarean section, and the revival of symphyseotomy. While this is quite true, there is yet another important element to consider—namely, the improved methods in teaching obstetrics. Clinical teaching in the lying-in-room has done more to advance the art and science of obstetrics than all else combined, and this author is, happily, one of the ablest exponents of this advance.

Garrigues is a veteran teacher both of gynecology and obstetrics; he has written one of the best treatises on the former, and in the present book, which may be regarded as the crowning work of his life, he has far outstripped his previous record as teacher and author. This work is destined to take place in the front rank as a textbook, and is sure to be referred to in all future time as a scientific exposition of the obstetric art reduced to the practical and presented in most attractive form.

The illustrations deserve praise for their number, quality, and artistic perfection. They are profuse, original, some are drawn from nature, several are actual in size, and all are helpful toward a completer understanding of the text.

The distinguished author deserves the congratulations of his professional confrères for the service he has performed toward perfecting the science of medicine.

CLINICAL SURGERY. For the Instruction of Practitioners and Students of Surgery. By A. J. OCHSNER, B. S., F. R. M. S., M. D., Chicago, Surgeon-in-Chief, Augustana Hospital, and St. Mary's Hospital; Professor of Clinical Surgery, Medical Department, University of Illinois. Royal octavo, pp. 481. Profusely illustrated. Cleveland Press (The Clinical Review Publishing Company). 1902. [Price, cloth, $6.00; half morocco, $7.00.]

The author of this work has attracted attention of late as a teacher of original methods and of the forceful application of principles. He has constructed a book on these lines, though he modestly declaims originality in his preface. He says he has not invented a single new operation, nor devised a new instrument, but has been content to apply what experience has shown to be the best in surgical practice, past and present. This, after all is about the wisest plan, for it has been said often and truly, that "there is nothing new under the sun." In surgery the most that is new is something described under a new name, or in a new place.

This is essentially a clinical treatise setting forth the author's own methods of procedure in the various conditions dealt with. Under the head of general surgical considerations the author presents a homily on the patient, showing how surgical results are determined often by the individual and his environment. Ochsner then proceeds to discuss in the order as here given, hernia, abdominal surgery, surgery of the gall-bladder, of the stomach, of the intestines, of the kidney, of the pelvis, of the chest, of the neck, of the mouth, of the face, of the skull, of the genitourinary organs, of the rectum, of the female genital tract,

and of the extremities. These are the limitations of the book. We will now invite attention to some of its salients.

Some kind friend has sent us a summary of the leading features of this treatise, which is so truthful and concise that we use it in part as a conclusion to the notice.

It calls attention to the following general points: first, the almost life-size of the page illustrations; second, that the engravings are all new, made from original drawings of clinical cases; third, clearness of text and wide margins permitting notes; fourth, excellent quality of paper, press work and binding; fifth, originality, brevity and conciseness; sixth, clinical surgery taught by cases illustrated with cuts and descriptive text; seventh, absence of discussion concerning unsettled problems, elimination of obsolete methods, and avoidance of repetition; eighth, a presentation of newer surgery, and advanced technic, with force and conviction based on experience.

It is a book of instruction for him who must needs practice surgery, and will furnish him an aid and a guide in difficulties that are sure to beset his pathway.

THE PRACTICE OF SURGERY. A Treatise on Surgery for the Use of Practitioners and Students. By HENRY R. WHARTON, M. D., Clinical Professor of Surgery, Woman's Medical College of Pennsylvania; Surgeon to the Presbyterian and Children's Hospitals, Philadelphia. And B. Farquhar Curtis, M. D., Professor of Clinical Surgery, and Adjunct Professor of the Principles of Surgery in the University and Bellevue College of New York. Third edition. Octavo, pp. 1249. Illustrated. Philadelphia and London: J. B. Lippincott Company. 1902.

From the year 1897, when this work first came forth, to the present time, marks an important period in the history of surgery. Into this narrow space, if a section of time may be so designated, events have crowded with an astonishing compactness. Many surgical treatises have issued from the press, each with distinctive features and special merit. From the practical side of the subject, however, it may be asserted that none have excelled the work under consideration.

The aim of the authors at the outset, was to present a book that would contain a reasonably full description of surgical injuries and diseases, to give directions for their treatment, and to outline the accepted facts and theories of etiology, pathology, and bacteriology. How well they have succeeded these three splendid editions in a little more than five years abundantly testify.

Another special aim of the authors has been to present the diagnosis of surgical injuries and diseases in a strong light, and this is a supremely important point, contributing to the great practical character of the treatise; and this, in turn, has made for its success. In this edition, which has not only been revised, but rewritten and reset, will be found a concise yet ample presentation of the practical side of surgery, applicable to the needs of the busy general practitioner. The display sub-

heads make it easy of reference and the mechanical execution of the volume could scarcely be better. In the matter of illustrations it merits great praise for quantity and quality—a matter of great moment to both student and graduate.

The distinguished authors are entitled to a full measure of praise for presenting the profession with one of the most valuable books that has appeared in years, it being a distinct addition to the literature of American surgery.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume I. General Medicine. Edited by Frank Billings, M. S., M. D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, M. D., Professor of Medicine, Chicago Clinical School. Duodecimo, pp. 358. Chicago: The Year Book Publishers. 1902. [Price, $1.50; entire series, $7.50.]

This number deals with diseases of the respiratory organs, diseases of the circulatory organs, diseases of the blood and blood-making organs; with general infectious diseases of the ductless glands, diseases of the kidneys, and with a miscellaneous group embracing osteomalacia, osteitis deformans, the caisson disease, and morphine poisoning.

In this book will be found an excellent résumé of the literature of the year relating to the foregoing subjects, supplemented by comments of the editors whenever these seemed necessary to further intelligently exploit the subject commented upon. Whoever desires a practical assembling of the best literature of general medicine for the period indicated will find it in this book.

AMERICAN EDITION OF NOTHNAGEL'S PRACTICE. Volume IV. Diseases of the Bronchi and Lungs. Diseases of the Bronchi, by Dr. F. A. Hoffman, of Leipsic. Diseases of the Pleura, by Dr. O. Roseebach, of Berlin. Pneumonia, by Dr. F. Aufrecht, of Magdeburg. Edited, with additions, by JOHN H. MUSSER, M. D., Professor of Clinical Medicine, University of Pennsylvania. Octavo volume of 1,030 pages. Illustrated, including 7 full-page colored lithographic plates. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $5.00 net; half-morocco, $6.00 net.]

The group of monographs that form this volume are upon subjects second in importance to none in the whole domain of medicine. They deal with that portion of the air tract that is extremely vulnerable, and when it becomes diseased it puts the entire economy *hors de combat* for a considerable period of time. These essays, among the ablest ever written upon these subjects, are offered by men of great learning, and who have bestowed exhaustive research upon these several themes.

Without attempting to cover the whole field in a book notice, we may nevertheless, point out some of the novel features developed in the pages of this volume. Passing over the anatomical and physiological additions relating to the bronchi, we note the recording of recent researches on fibrinous bronchitis,

on eosinophilia and Fränkel's researches in asthma. The view is upheld that pneumonia is a general pneumococcus infection, in which, of course, toxemia is the chief danger. The surgical treatment of surgical complications is advocated, and modern methods of diagnosis, including Röntgen rays are pointed out, and their useful limitations defined.

The section on pleurisy is particularly attractive, in which is given the newer bacteriological studies relating to this affection; also Morse's recent studies on the leucocytes, together with the other clinical phenomena of greater or less importance.

The additions by the American editor, Dr. Musser, increase the interest and importance of the work in no small degree. By and large, it is a treatise that reflects the highest credit upon the science and literature of medicine.

THE AMERICAN TEXTBOOK OF OBSTETRICS. In two volumes. Edited by RICHARD C. NORRIS, M. D.; Art Editor, Robert L. Dickinson, M. D. Second edition, thoroughly revised and enlarged. Two handsome imperial 8vo volumes of about 600 pages each; nearly 600 text illustrations, and 49 colored and half-tone plates. Philadelphia and London: W. B. Saunders & Co. 1902. [Per volume: cloth, $3.50 net; sheep or half-morocco, $4.00 net.]

The second edition of this work finds the obstetric art advanced considerably beyond its status seven or eight years ago, when the textbook first appeared. It is true, also, that in its scientific aspects obstetrics has progressed amazingly during the last decade. Bacteriology has contributed its full share to this advancement, and chemicobiological research has also added to the improved pathology of the present day. Taking advantage of their opportunities the editors and contributors to this edition have brought it forward in all these as well as in other particulars, until it may be said to express the most advanced thought upon the art and science of obstetrics.

The surgery of obstetrics has been given a deservedly prominent place, and new applications of it have been made; new chapters have been added or old ones rewritten; new illustrations have appeared, and taken together this new edition—which appears in two volumes instead of one, as formerly—presents the whole obstetric field in the strongest light, and boldest manner. Student and practitioner, junior and senior physician—all may gain information of the most valuable kind by studying this work with care. In the art department it is unrivaled and we particularly note that Walcher's position is clearly and properly illustrated.

BLAKISTON'S QUIZ COMPENDS, No. 4. A compend of Human Physiology. Especially adapted for the use of Medical Students. By ALBERT P. BRUBAKER, A. M., M. D., Adjunct Professor of Physiology and Hygiene in the Jefferson Medical College. Eleventh edition, revised and enlarged. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, 80 cents.]

This compend is one of the most useful of the series, and is an excellent reminder of the essentials of physiology. While

it is especially intended for students, it is of almost equal service to practitioners. It will do all of us good to refresh our minds upon this great subject, and this book would be an interesting companion on a railway journey for the purpose named. The table of physiologic constituents at the end of the volume is worth its price.

TEXTBOOK OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By JOHN J. REESE, M. D., late Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania. Sixth edition. Revised by Henry Leffmann, A. M., M. D., Professor of Chemistry and Toxicology in the Woman's Medical College of Pennsylvania. 12mo pp. 676. Philadelphia: P. Blakiston's Son & Co 1902. [Price, $3 00 net.]

The occasional reappearance of this book in new editions is looked forward to by all who are familiar with it, and especially by the students of legal medicine. There have been some recent developments in toxicology, also some of the synthetic organic bodies that are used frequently in the household have been found to occasion poisoning in some instances and these are set forth in this edition. The extensive use of water gas—carbon monoxid—has caused poisoning in numerous instances, it being much more deadly than illuminating gas made in the old way, and this fact is dealt with in this book. Several new phases are noted, among which may be mentioned the employment of alcohol in carbolic acid poisoning. In short, the recent data of trustworthy nature are herein incorporated and the book is thus brought forward to the immediate present in all essential particulars, while still retaining its original distinctive features.

THE PUBLIC AND THE DOCTOR. By B. E. HADRA, M. D., Dallas, Texas. 1902. [Price, 50 cents.]

That the relations of the general public and the doctor are not what they should be admits of no argument, because it is a statement that cannot be controverted. This monograph of Dr. Hadra's will serve to bring the people and physicians into closer touch if its circulation and attentive reading should be sufficiently widespread. The eminent position of the author should serve to carry weight to his utterances and to give them a large audience.

MEDICAL MICROSCOPY. Designed for Students in Laboratory Work and for Practitioners. By T. E. OERTEL, M. D., Professor of Histology, Pathology, Bacteriology, and Clinical Microscopy, Medical Department, University of Georgia. Duodecimo, pp. 374. With 131 illustrations, some of which are colored. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $2.00 net.]

Dr. Oertel presents a work intended both as a laboratory manual and as a guide to the practitioner who is unable to avail himself of a post-graduate course in clinical microscopy. He includes in the volume the subject of bacteriology so far as it pertains to clinical medicine, the examination of the blood, the

preparation of sections, and the examination of the same with special reference to malignant growths, the examination of the urine, sputum, and the like. As a laboratory guide the book is an excellent one. It will not teach the solitary student how to become an expert microscopist. It will, however, be as useful as a book can be in teaching him the technic of microscopy. With the beginner ever in mind, Dr. Oertel has presented his subject in the simplest possible manner, giving in most instances but one method of doing a certain thing, and that the one most simple, or least liable to error.

The illustrations are numerous and good.

M. J. F.

BOOKS RECEIVED.

Transactions of the American Gynecological Society. Twenty-seventh annual meeting held at Alantic City, May 27–29, 1902. J. Riddle Goffe, M. D., Secretary. Philadelphia: William J. Dornan, Printer. 1902.

Lea's Series of Medical Epitomes A Manual of Obstetrics for Students and Practitioners. By W. P. Manton, M. D., Adjunct-Professor of Obstetrics and Professor of Clinical Gynecology, Detroit College of Medicine. In one 12mo volume of 265 pages, with 82 illustrations. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $1.00.]

A Text-Book of Practical Medicine. For the Use of Students and Practitioners. By William Gilman Thompson, M. D., Professor of Medicine in Cornell University Medical College, Physician to the Presbyterian Hospital, Bellevue Hospital, New York. New (second) edition, thoroughly revised. In one 8vo volume of 1,104 pages, with 62 illustrations. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $5.00; leather, $6.00; half morocco, $6.50 net.]

The American Year-Book of Medicine and Surgery for 1903. A Yearly Digest of Scientific Progress and Authoritative Opinions in all Branches of Medicine and Surgery, drawn from journals, monographs and textbooks of the leading American and foreign authors and investigators. Arranged, with critical editorial comments, by eminent American specialists, under the editorial charge of George M. Gould, A. M., M. D. In two volumes—Volume I., including General Medicine; 8vo, 700 pages, fully illustrated. Volume II., General Surgery; 8vo, 670 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1903. [Per volume: cloth, $3 00 net; half morocco, $3.75 net.]

Blakiston's Quiz Compends. A Compend of Diseases of Children. Especially adapted for the use of Medical Students. By Marcus P. Hatfield, A. M., M. D., Emeritus Professor of Diseases of Children, Northwestern University Medical School; Physician to Wesley Hospital, Home for Crippled Children, Chicago Orphan Asylum, Chicago. Duodecimo, pp. 241. Third edition, thoroughly revised, with colored plate. Philadelphia: P. Blakiston's Son & Co. 1903. [Price, 80 cents.]

Cushny's Pharmacology and Therapeutics. A Textbook of Pharmacology and Therapeutics; or the Action of Drugs in Health and Disease. By Arthur R. Cushny, A. M., M. D, Professor of Materia Medica and Therapeutics, University of Michigan, Department of Medicine and Surgery, Ann Arbor, Mich. Third edition, revised and enlarged. In one 8vo volume of 750 pages, with 52 engravings. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $3.75 net; leather, $4.75 net.]

Lea's Series of Medical Epitomes. An Epitome of Physiology. For Students and Practitioners of Medicine. By Theodore C. Guenther, M. D., Assistant Physician, Norwegian Hospital, Brooklyn, and Augustus E. Guenther, B. S., formerly Assistant in Physiology in the Medical Department, University of Michigan, Ann

Arbor. Series edited by Victor C. Pedersen, A. M , M. D , Clinical Assistant in Surgery at the New York Polyclinic Medical School and Hospital. In one 12mo volume of 250 pages, with 57 engravings. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $1.00 net.]

International Clinics. A quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and other Topics of Interest to Students and Practitioners, by leading members of the medical profession throughout the world Edited by Henry W. Cattell, A.M., M.D., Philadelphia. With the collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G. Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London. With regular correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume IV. Twelfth series. Philadelphia and London: J. B. Lippincott Co. [Cloth, $2.00.]

Huntington's Abdominal Anatomy. The Anatomy of the Human Peritoneum and Abdominal Cavity considered from the standpoint of Development and Comparative Anatomy. By George S. Huntington, M. D., Professor of Anatomy in the College of Physicians and Surgeons, Columbia University, New York City. In one handsome quarto volume of 590 pages, including 300 full-page plates in colors and monochrome, containing 582 figures. Philadelphia and New York: Lea Brothers & Co. 1903. [De luxe edition, gilt top, uncut edges, $10.00 net.]

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof. Dr. Carl von Noorden, Senior Physician to the City Hospital in Frankfort a. M. Authorised American edition translated under the direction of Boardman Reed, M.D , Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College, Philadelphia. Part I. Obesity. The Indications for Reduction Cures. Duodecimo, pp. 59. New York: E B. Treat & Company. 1903. [Price, 50 cents.]

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof. Dr. Carl von Noorden, Physician-in-chief to the City Hospital, Frankfort a. M. Authorised American edition translated under the direction of Boardman Reed, M.D., Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part II., Nephritis. Duodecimo, pp. 112. New York: E. B. Treat & Company. 1903. [Price, $1.00.]

Diseases of the Skin. Their Description, Pathology, Diagnosis, and Treatment. With special reference to the Skin Eruptions of Children and an Analysis of 15,000 cases of Skin Disease. By H. Radcliffe-Crocker, M. D , (Lond.), F. R. C. P., Physician for Diseases of the Skin in University College Hospital; Honorary Member of the American Dermatological Society; Examiner in Medicine, Apothecaries' Hall, London. Third edition, revised and enlarged. With four plates and 112 illustrations. Octavo, pp. 1,466. Philadelphia: P. Blakiston's Son & Co. 1903. [Price, $5.00.]

Obstetrics. A Textbook for the use of Students and Practitioners By J. Whitridge Williams, Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief to the Johns Hopkins Hospital; Gynecologist to the Union Protestant Infirmary, Baltimore. Octavo, pp. 867. With eight colored plates and 630 illustrations in the text New York and London: D. Appleton & Company. 1903. [Price, $6.00.]

LITERARY NOTES.

THE *Internal Secretions and the Principles of Medicine*, is the title of a new work by Dr. Charles E. de M. Sajous, of Philadelphia, the first volume of which is announced to appear the latter part

of February, 1903. Dr. Sajous is so well known to the profession of medicine over the whole world through the "Annual of the Universal Medical Sciences" and its successor the "Analytical Cyclopedia of Practical Medicine," that a work from his pen will be received with favor. The study of the ductless glands is becoming one of vast interest, and may lead to a new era in practical medicine. From the advanced sheets of the preface and summary of contents of the first volume, we are led to believe that this work will be of absorbing interest to the student of internal medicine. It is published by the F. A. Davis Company, of Philadelphia.

THE Annual Report of the Department of Health of the City of Niagara Falls for 1902 has been issued. It is a well prepared document, showing in detail the conditions affecting the health of the city, its vital statistics, and many data of importance relating to public sanitation. It reflects the highest credit upon Dr. C. G. Leo-Wolf, the efficient health officer. During the year there were 412 marriages in that city, of which 231 were of non-resident couples. The traditional belief that Niagara Falls is a city of honeymoons seems to be well founded.

THE *Journal of Tuberculosis*, the well-known quarterly magazine devoted to the consideration of the prevention and treatment of tuberculosis, began its fifth volume in January, 1903. This number contains six original communications by prominent writers, domestic and foreign, besides translations, reviews of current literature, and editorial comment. The journal is edited by Drs. Karl and Silvio von Ruck, of Asheville, N.C., and merits the attention of all persons interested in the problems of which it treats.

Northwest Medicine is the title of a new journal that has recently appeared and is published at Seattle, Washington. The first number bears the date of January, 1903, and it presents a good front. It is edited by Dr. Clarence A. Smith and is published by the Washington Medical Library Association.

Modern Medical Preparations is the title of a handy little brochure, issued by Victor Koechl & Co., of New York, which gives important information concerning the products of the Farbwerke, formerly Meister Lucius and Brüning, Hoechst-on-Main, and vereinigte Chemische Werke, formerly Benno Jaffé

and Darmstadter, Charlottenburg, Germany. It gives the clinical history, therapeutics, bibliography, and price of each article, and is a most useful book of reference.

The New York State Hospital for the care of Crippled and Deformed Children, located at Tarrytown, has issued its second annual report, which is for the year ending September 30, 1902. During this period thirty-five patients have been treated, of whom ten have been discharged. About 150 applications for admission have been made during the year, but owing to the restricted accommodations the larger portion could not be accepted. If the hospital had been equipped with 500 beds, Dr. Shaffer, the surgeon-in-chief, says he could have filled them in a month with deserving patients. Let the state enlarge the hospital that its good work may continue and its benefit extend to the needy crippled and deformed children.

Prof. John Uri Lloyd's famous satires, the first of which, "The Mother of Sam Hill's Wife's Sister," was published in the September *Criterion* (1901), are resumed in the January number with the fourth paper of the series, "Sam Hill, Sheriff of Knowlton, Kaintuck," and purport to be related by "Chinnie Bill Smith," the famous story teller of "Stringtown On The Pike." These satires, written exclusively for the *Criterion*, will be illustrated by Martin Justice, whose character studies are second to none in the magazine field. Prof. Lloyd's inimitable style and daring, yet kindly humor, will be a rare treat to *Criterion* readers. A deeper meaning will be read between the lines of these unusual papers by thoughtful minds. The next paper, "Why a Kentuckian Stands with his Back to the Stove, The Testing of Milinda," by Sam Hill, will appear in the March *Criterion*, and the remaining stories during the year 1903.

ITEM.

Lewis S. Matthews & Co., of St. Louis, Mo., the widely known dealers in medical publications, have removed from 219 North 10th St. to 2623 Olive Street. This house, exclusively devoted to handling medical books and other publications,—American, English, French and German,—offers unusual facilities to purchasers, and solicits correspondence with physicians located in any part of the world.

FOR SALE.—The instruments, batteries, bags, office furniture and professional library of the late Dr. Herman Mynter are for sale at his late residence, 566 Delaware Avenue.

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ORIGINAL COMMUNICATIONS.

The Toxins of Insanity.[1]

BY JAMES WRIGHT PUTNAM, M. D., Buffalo, N. Y.,

Professor of Nervous Diseases, University of Buffalo; President of the American Neurological Association.

THE clinician in the daily round of practice comes in contact with diseases which so change physiologic processes that new products are formed. These products act upon nerve tissues as poisons and, according to the individual's heredity or personal tendency, he is afflicted with some form of disturbance of the nervous system. Prominent among the diseases which may so generate or produce poisons are Bright's disease and diabetes mellitus.

We are all familiar with the facts. Many cases of Bright's disease show headache, insomnia, interference with intellectual processes. The ophthalmologists meet with the choked disc or albuminuric retinitis, uremic convulsions, coma and paralyses, which may be monoplegias or hemiplegias. All may occur as a result of the retention of various tissue poisons in the blood, which should have been eliminated by the kidneys. To diagnosticate uremic coma, is not as easy as some of the textbooks would lead us to suppose. Usually the coma is more profound after cerebral apoplexy and after an epileptic convulsion. The pupils in the coma of Bright's disease may be normal, contracted or dilated; they are rarely unequal. The temperature is usually subnormal, which is not the case in coma from apoplexy, or in the coma of status epilepticus.

The blood, according to Von Jaksch, always shows excess of acid, so that given a case of coma with excess of acid, low tem-

1. Read before the Buffalo Medical Club, November, 1902.

perature and retinitis, we have a right to make a diagnosis of Bright's disease or uremic coma. In place of coma, chronic nephritis may terminate in muttering delirium.

Insanity of various types has been observed in both the acute and the chronic varieties of Bright's disease. Insanity is much more frequent in the cases with contracted kidney than it is with the large white kidney. The insanity may appear when the presence of albumin is only indicated as a trace in the urine. The most commonly observed form is the confusional insanity, with hallucinations and with restlessness. So important a fact is this that Berkley says: "The presence of confusional insanity nearly always indicates a toxemia from some source and it behooves the physician to make frequent and accurate examinations of the urine in all suspicious cases in order to avoid unfortunate mistakes in diagnosis." We may also have simple melancholia, or a more active melancholia with distinct delusions of persecution, or we may meet with mania and dementia.

In diabetes, we find an evidence of a tendency to nervous tissue changes in a variety of symptoms. The oculist meets ophthalmoplegias, myosis, optic nerve atrophy, retinitis, and retinal hemorrhages. The general practitioner encounters diabetic apoplexy, headache, migraine, neuritis and attacks of vertigo. The alienist will meet with varied forms of insanity.

It is to be stated, however, that diabetes rarely causes insanity in individuals with a good heredity. In individuals predisposed to insanity the poison from glycosuria is apt to bring on mental changes. Melancholia which improves as the diabetes improves has been observed. Maniacal disturbances, in which there is great activity has been described. On the other hand, no less an authority than Savage, who was for years at the head of Bethlehem, more popularly known as Bedlam, in England, says: "I know of no direct relation between diabetes and insanity."

Berkley refers to the fact that in diabetes we may have a grouping of symptoms which resembles paretic dementia, viz.: the pseudo-paresis diabetica.

The first period is marked by headache and vertigo. This is followed by loss of interest in affairs, loss of memory. This is succeeded by a period of excitement with shifting delusions of grandeur. These persist for a time to be succeeded by tremor in the muscles of the face, changes in speech, changes in

patellar and pupillary reflexes, and terminates in dementia. Acetone is probably the poison responsible for the final coma.

With the intoxication insanities dependent upon a disordered alimentary canal, we have all had some experience, I came near saying personal experience, for few of us have escaped the mental symptoms known as apathy and disinclination to work, accompanied by some irritability, and associated with this some headache. Such symptoms being temporary in character, we have not classified as insanity, but have called them indigestion and constipation, and have cured them by blue pills, salines, abstinence from food and by enforced exercise. But there are cases on record of actual insanities of true intestinal origin. One was by Solders, recorded in the *Jahrbuch für Psychologie*, Bd. xvii.

A woman, 40 years old, had been constipated for six days, then became suddenly insane, showing a typical picture of confusional mania with excitement. All the symptoms disappeared promptly after the bowel was unloaded.

Berkley records a case of a man 70 years old who after constipation lasting one week, had an intense headache, this was followed by clouding of mental faculties and the hallucination of a head with a long grey beard beside his own head. Arguments were of no avail. The hallucination persisted until under lavage and saline cathartics he recovered in twenty-four hours and did not relapse.

The chemical examination of the urine shows two kinds of autotoxins from the intestinal tract. Acetone has been found in large quantities, and also diacetic and oxybutyric acid in the urine of patients with mental symptoms.

The decomposition of albumin in the bowel shows itself in the urine as ethereal sulphates, as indican, or indoxyl-potassium sulphate, and as skatol or skatoxyl-potassium sulphate. The indican appears as a result of fermentation in the small intestine and is usually much increased by constipation. The presence of skatol is generally an indication of decomposition of matter in the large intestine. There is no difference in the symptomatology of the insanities produced by the toxins of the ethereal sulphates, or of acetone. The onset is usually gradual. There is dull, heavy headache, hypochondriasis, mental confusion, and sometimes stupor. There is usually no fever.

Berkley says through its whole course the disease is usually afebrile and there are no remissions. In these respects it differs

from acute delirium. Like acute delirium there may be great motor agitation with rapid loss of strength.

Again, in autointoxication manias, we may have a folie circulaire. There will be ten to fourteen days of hallucination, with excitement; this is succeeded by a longer period of inertia, sometimes amounting to stupor; then a gradual return to normal, active mental life in the course of about two or three months. Recovery may be complete or the cycle of mental phenomena may be repeated. Autopsies in such cases have been made. They have revealed changes in the mucous membrane of the intestines, constipation, and parenchymatous degeneration in the kidneys and liver.

General hyperemia of the brain and membranes with edema has been reported. In the insanities produced by alterations in the secretions of the thyroid, we have a most interesting subject. Those of us who have seen much of exophthalmic goitre must have noted mental changes in a certain percentage of cases. There is in the hypertrophied gland a change in the thyroid secretion either in quantity or in quality, which exerts a powerful influence upon the nervous system. This influence is shown in the rapid heart beat, in the neurasthenia, hysteria and in the various insanities.

Berkley says that the attendant psychosis of exophthalmic goitre is usually of the maniacal type, sometimes characterised by morbid impulses, insane actions and insistent ideas.

My own experience is singularly different from this. I have never seen mania or anything approaching it in Graves's disease, but I have observed profound mental depression, marked by disinclination to read, a wish to be left alone by friends, and a tendency to frequent attacks of weeping and suicidal ideas.

The course of insanity in three of Berkley's patients was very gradual, lasting for several years and all passing into terminal dementia.

Gowers says of the insanities of exophthalmic goitre: slight mental change, irritability, depression and restlessness are common, but in the cases amounting to actual insanity, which often begin with hallucinations, the form varies. "It may be melancholia or simple mania, or a general paralysis of the insane. Of these, mania is the most common and may be the cause of death. It sometimes lapses into chronic insanity."

Again, in patients suffering from exophthalmic goitre, who have no mental symptoms, operations removing a part or the

whole of the thyroid gland have been followed by a post-operative myxedema. This is usually accompanied by marked mental changes in which periodic mania and circular insanities are common. Other cases of myxedematous insanity become stupid, feeble and untidy and show every sign of profound poison. It is in this type of insanity that we see the striking result of thyroid therapy. Patients with proper doses of thyroid extract improve with astonishing rapidity in mental and physical symptoms.

While upon this subject of myxedematous insanity, I shall take the liberty of digressing enough to quote from Osler's paper on Sporadic Cretinism in America,—his summing up of the character of the changes in myxedematous cretins under the thyroid treatment.

(*a*) Bodily—loss in weight, due to disappearance of the myxedematous condition and of the fat, is noticed within a month or six weeks after the commencement of the treatment. The face becomes thinner, the palpebral orifices wider, the puffiness disappears from about the eyes, the flabby supraclavicular folds melt away, the projecting abdomen diminishes in girth, and the child's figure becomes more shapely. Several of the photographs illustrate this in an interesting manner. This change is much more striking in young children of from three to six or eight years, but it is also well seen in the older patients. Nothing could be more remarkable than the change in the features in Dr. Carson's case, and even in Dr. Sinkler's case, aged 30 years, the change, as shown in the photograph, is most evident. The expression of the face is altered by the recession of the tongue, and in many instances the drooling ceases as the mouth is kept closed; this relieves in great part the idiotic expression.

Among the constructive and progressive alterations may be mentioned the loss of the waxy pallor of the skin, which become softer and much more natural-looking. The hair, too, changes and becomes more abundant and finer. Several writers have referred very particularly to this remarkable change in the skin and hair, as though there had been a complete substitution of the old by a new skin and hair. In very young children teething proceeds rapidly; in older subjects, if the second dentition has not begun, the milk-teeth are shed and the permanent ones develop rapidly. No change is so remarkable as the increase in stature, as Dr. John Thomson remarks, "the natural impulses of growth, which were in abeyance in the thyroidless condition, are let loose."

In my first case the little girl grew four inches in a year. Among the most remarkable in the collected series are the following: Dr. Friend's case gained eleven and three quarter inches in one year and ten months; Dr. Vincke's case gained

nine inches in one year and seven months, and Dr. Noyes's case gained eight inches in four and a half months, and Dr. Edwin F. Wilson's case gained seven inches in six months.

(*b*) Mental change—even within a couple of months the alteration in the mental condition is noticed. At any rate, the patients look much brighter and the face is not absolutely expressionless. As a rule, the younger the case the more marked is the mental change. Young cretins who have not learned to speak a word soon begin to talk in their play. In children between six and ten, the effects are even more remarkable, and with the loss of the myxedematous condition there is a corresponding awakening of the mental faculties. In older patients the treatment is not so efficacious. In case II. of Osler's series, the girl aged 19 years did not seem to be very much benefited, although it is true the treatment was abandoned by the mother after a short time. In other instances, as in Dr. Sinkler's case, the mental condition improved very much, even though the patient was over 30 years old.

Insanity of pregnancy is rather rare, for the mental changes observed during gestation do not often amount to insanity In those women affected with the albuminuria or glycosuria of pregnancy, there have been several cases of melancholia or mania reported. These cases have been attributed to the toxins of the ammonium series. It is especially the postparturient insanity that is of definite septic origin. The postpartum insanities are divided by Berkley into (*a*) those cases in which infection comes from some portion of the genital tract, or in a few instances from the mammæ; (*b*) the toxin from the accumulation in the blood and tissues of carbamate of ammonium and chemical products of incomplete tissue metamorphosis, producing irritation of the nervous system.

In a few cases septic infection can be excluded. This last class it is not our province to discuss.

The first class, induced by infection through the genital tract, is the typical puerperal insanity. All recent writers are united in the opinion that infection is the most frequent cause.

In Johns Hopkins, Prof. Whitridge Williams reported two cases of puerperal mania in which cultures taken from the interior of the uterus showed the streptococcus pyogenes. Berkley had one case of puerperal mania in which cultures from the blood and from the vaginal secretions showed streptococci. Clouston also had a case of puerperal mania which showed at the post-mortem pus on the peritoneal surface of the uterus. The mucous membrane of the uterus showed purulent material.

There were deposits of pus all through the uterine wall. The most frequent primary seat of the infection is presumably the placental site, as the open vessels afford an easy and ready means for conveying infection from unclean exploring hands or instruments, but nature is kind and wonderfully protecting, for according to McLeod, 1 in 1950 parturient women was affected in England with puerperal insanity as gathered from the statistics of hospitals from 1878-1882. From all tables published the records show that one woman in 616 deliveries becomes insane; yet it is probable that more than 1 in 616 run the risk of infection.

Beside the placental site contagion may be traced to lacerated perineums, bruising and contusions of the vagina. In considering the subject of infection it is necessary to refer to a paper of Dr. Hobbs, superintendent of the asylum for the insane at London, Ont. He classifies the septic insanities of the puerperium under three heads: (1) puerperal insanity with little or no local lesion caused by septic infection. These insanities he believes occur probably from absorption into the circulation of the toxins of an infected clot, or by the absorption of the saprophyte germ which finds lodgment in the detritus of a puerperal uterus. The majority of these cases are of short duration and recover at home; (2) puerperal insanity, complicated by gross local lesion, the result of sepsis. These cases are more serious as the local inflammatory lesion keeps up a continued supply of the virus, so that the majority of the patients do not recover under ordinary treatment; (3) he calls post-puerperal insanity induced by pelvic disease, which is the result of septic infection. These cases are the ones in which insanity develops in 6 to 8 months after the accouchement.

Of the last class he says in the past four and one-half years 80 cases were admitted to the asylum with inflammatory disease of the pelvic organs, brought about by septic invasion. All of these 80 cases had chronic metritis, 42 had diseased cervices, 33 had retrodisplacements, 19 had lacerations of the perineum, 11 had inflammatory, tubal or ovarian disease, 3 had fibroids, 1 a deep seated rectal fistula. Upon suitable surgical treatment, 36 were cured mentally, 20 more were improved, 24 were unimproved. He concludes with a strong plea for the prevention of septic invasion. In the discussion of this paper, Dr. Carlos Macdonald placed himself on record as believing that a considerable proportion of puerperal insanities were due to sepsis. Savage, of

England, is as yet unconvinced of the septic origin of many puerperal insanities.

There still remains for our consideration the psychoses of the different fevers. Of these typhoid fever, influenza, pneumonia and scarlet fever, according to Berkley, rank first in importance. Regis, in his book, holds that scarlet fever, measles and diphtheria very rarely produce insanity. He places variola as the eruptive fever most frequently complicated by insanity. Regis states that in convalescence from variola, melancholia with suicidal tendency is the most common.

In all the febrile diseases, disturbance of mental functions may appear as an initial delirium: (1) upon the onset of fever; (2) at the height of the fever; (3) after the disappearance of the fever, as a post-febrile exhaustion psychosis. In the initial delirium and in the febrile delirium, the theory is held "that the presence of certain toxalbumins, resulting from the high temperature and from the chemical action of the specific microorganisms, combined with increased rapidity of circulation, cause the delirium. Berkley puts the matter tersely in a single sentence:

The over-setting of the mental functions is due to the virulence of the bacterial toxalbumins combined with high fever and deprivation of a sufficient nutrient supply to the cerebrum.

Regis, quoting Chardon's thesis of 1889, says:

Infectious diseases may cause insanity in three ways: (1) by the direct action of the microbes localised in the nervous centers; (2) by the action of the products secreted by the microbes; (3) by autointoxication by products not duly eliminated by the patient.

In the cases of post-febrile insanity, we have the condition of the patient characterised as exhaustion. The specific poison of the bacteria has been met and overcome either by tissue resistance or by the development of an antitoxin, and the patient, so far as the specific disease is concerned, is getting well, when after only a few hours of either excitement or confusion, or depression, the patient passes into actual insanity. The theories advanced to account for this have been the exhaustion theory.

Sterns, the medical superintendent of the Hartford Retreat, in his lectures at Yale Medical School, supports this theory of exhaustion. He argues that as patients are treated more and more on the plan of increased nutrition, patients with post-febrile insanity are less numerous than formerly.

Kraepelin, Berkley, and Regis believe that the intoxication and the inanition theory together are the important factors in the febrile and post-febrile psychoses.

The subject of toxins of insanity, as may be seen, covers a wide field, and one that has only lately been studied. The present writers of textbooks on insanity all refer to the subject and are more or less vigorous advocates of the theory of toxins as a cause of insanity.

As a summary, I quote from Peterson and from Bannister as the last American writers on the subject. Peterson says:

The more mysterious poisons produced by disease in various parts of the body, by fermenting or putrefying substances in the alimentary tract, and by some of the infectious fevers, have only of late taken an important place in the etiology of the psychoses. We do not yet know how frequently autointoxication from absorption of intestinal poisons determines insanity, but the facts so far collected point to the origin of a considerable number of cases from this cause.

In Brower and Bannister we read:

Intestinal autointoxication is one of the best established etiologic factors of insanity. In the severer infectious disorders, mental derangement is in many cases, and to a large extent, due to the toxins.

Thus, it may be seen the theory of toxins of insanity is one which is winning adherents. Its close connection with so many of the general diseases makes it of special interest to the general practitioner and specialist alike.

525 Delaware Avenue

Successful Removal of 265 cm. of Gangrenous Intestine.

By ROSWELL PARK, M. D., LL. D., Buffalo, N. Y.,
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A YOUNG man of 21, previously healthy, living about one hundred miles from Buffalo, was seized with severe pain in the lower part of the abdomen on November 21, 1901. The pain and tenderness were centrally located rather than upon the right side, and I was assured by Dr. Allen, of Olean, that for three days at least there was no perceptible tumor formation. On the third day his temperature ran quite high; two days later it was much lower, and on the morning when he was brought to me his temperature was only 100° F.

Since his first attack of pain and in spite of vigorous catharsis there had been no movement of the bowels. Early in the morning of November 26, *i.e.*, five days after he was taken sick, he was brought to the Buffalo General Hospital, suffering a good deal of pain and requiring considerable anodyne upon the journey. Even at this time his pulse and temperature were lowering, but there was now distinct dulness above the pubes. His tongue and lips were dry and his general condition was indicative of profound sepsis. The abdomen was somewhat distended and rigid. He was occasionally vomiting material of bilious but not fecal character, and there had been no movement of the bowels.

He was promptly operated upon the same day, in clinic, chloroform being the anesthetic used. The incision was made in the middle line. Upon opening the abdomen it was found first that the omentum was firmly bound down, a little more on the right side than on the left, and made to cover in a mass of adherent intestinal coils, from between which as they were gently separated a quantity of very offensive sero-purulent fluid escaped. Some 500 or 600 c.c. of this fluid having been evacuated and the incision being extended from the pubis to the umbilicus, it was made apparent that the primary fault was a gangrenous condition of the appendix, about which three or four coils of small intestine had united themselves and adhered to the cecum, and that all these adherent surfaces were in a gangrenous condition with threatening perforation at numerous points. At least four large areas of this character were found upon the small bowel, the uppermost being apparently near the middle of its length, *i.e.*, a long distance above the cecum. It now became a question whether to undertake several intestinal resections or to remove the entire length of bowel which contained these gangrenous patches. The patient's condition was bad and it seemed that the measure most indicated was that which could be most quickly performed.

Accordingly, I used a Murphy button and with it connected the ascending colon with a loop of intestine just above the uppermost gangrenous area. The mesentery was then tied with a series of silk ligatures, and the entire section of small intestine involved was removed down to the ileocecal valve. A considerable part of the cecum being gangrenous, I divided the colon at this point by an oblique incision, and in this way removed all of its gangrenous portion.

Both ends of the bowel which remained, *i.e.*, small and large, were turned in and sutured, and reliance was placed solely upon the lateral anastomosis made with the button. The abdomen was closed with silkworm gut sutures, a glass drainage tube six inches in length being inserted, its lower end being deep in the pelvis. Infusion of salt solution was made during the operation and at one time it seemed as though the patient could not be gotten off the table alive.

After the operation the portion of intestine which was removed was straightened out and carefully measured. Without undue stretching it was found to measure 265 cm.=8 ft. 9 in.

During the first 24 hours after the operation the patient had intense pain requiring 30 cg. of morphine for his relief; but after this he became much more comfortable. From 3 to 6 cc. of fluid were drained off every two or three hours. Forty-eight hours later this fluid began to have a fecal odor. During this time his bowels had moved repeatedly. In fact, he suffered from such looseness and incontinence of feces as to require opium and starch water injections into the rectum. By the end of the second day his temperature was below 100° F. and his pulse was 120; he suffered from restlessness rather than from pain. On the fifth day the discharge through the drainage tube assumed a distinctly fecal character. A rubber tube was substituted for the glass.

The patient had a distinct fecal fistula for 3 or 4 months, although the amount discharged during the latter part of the time was very slight. All this time his bowels moved in perfectly natural manner and his appetite was more than normal. So far as could be, his diet was limited to that which the stomach and upper intestine could best digest.

The Murphy button did not come away until the 10th of March following, nearly 4 months after its insertion. After its passage there was a notable improvement in the fistulous condition. This eventually closed perfectly and the patient completely regained his health and strength. Eleven months later he reported by letter that he weighed as much as he ever did, enjoyed good appetite, and felt himself in the best of health in every respect.

This was the most extensive case of gangrene of intestines, following a primary gangrenous appendicitis, that has ever come to my notice. The history of events had evidently been as

follows: primary affection of the appendix with rapid gangrene, localised peritonitis with agglutination of the neighboring coils of small intestine, rapid infection of all the surfaces thus brought in contact with the primary focus, and prompt necrosis due in all probability to the virulence of the infecting organisms.

Some years ago I began to maintain that most cases of general peritonitis, which were not plainly due to some ordinarily easily recognised lesion, took their real origin from an inflamed appendix. In other words,—that is, to put it a little differently,—the appendix is at fault in most cases of so-called spontaneous peritonitis, and the right iliac fossa should be carefully interrogated in all cases of this general character. Furthermore, in many of these cases it would be wise to operate unless the patient be already moribund. I would agree with Dr. Joseph Price, that when there are symptoms of obstruction of the bowel we should open in the middle line; when the bowels are not obstructed the opening may be made over the cecum.

The relation of primary appendicitis to general peritonitis is now very much more widely appreciated than it was a few years ago, and yet there is need of insistence upon this possibility.

The location of the pain as described by the patient is not always a safe but is often a misleading sign. In this particular instance the patient's first complaint of pain was held to point rather to the general peritoneal cavity than to the appendix. I have repeatedly seen cases that had proceeded to gangrene where the pain was referred to the left side rather than to the right. In these cases there seems sometimes to occur even a transfer of tenderness, although this latter indication much less frequently misleads. Muscle spasm begins nearly always on the right side, but in severe cases will involve the entire abdominal musculature. As the infectious processes and ensuing necrosis extend, there will often ensue a reduction of temperature, even to subnormal, and a perceptible reduction of pulse rate. Occurring in this way these indications are not favorable but are rather to be dreaded. Chill does not always occur even though pus accumulates in considerable quantities. It is of the gravest import should it happen, but many of these cases may die without it.

I have gathered from literature sixteen cases, beside my own, where more than 200 cm. of bowel have been removed. Cases of removal of shorter sections are now so numerous that they have, perhaps, lost their principal surgical interest.

It is of interest that Blayney, reporting a case of this kind for Hayes in the *British Medical Journal* for November 16, 1901, took occasion to say that it seemed to him that to remove more than 200 cm. of intestine was to approach, if not to exceed, the danger line regarding future capacity for absorption of the necessary nutrition.

Obalinski's case, the last in the subjoined table, was one of removal of 365 cm. of intestine, but this happened to be in a boy, and comprised nearly his entire intestinal tract. This case promptly died. The other fatal cases, *i.e.*, Maydl's and Von Eiselsberg's, lived long enough to recover from the actual shock of operation and were the only ones who died. The other fifteen cases all recovered although from 205 to 330 cm. were exsected.

CASES OF INTESTINAL RESECTION WITH REMOVAL OF MORE THAN 200 CM. OF INTESTINE.

	Operator.	Amount Removed.	Result.
1	Koeberle	6 feet 10 inches = 205 cm.	Recovered.
2	Kocher	6 " 11 " = 208 "	"
3	Dressman	7 " 2 " = 215 "	"
4	Shepherd	7 " 9 " = 234 "	"
5	Kukula	7 " 9 " = 237 "	"
6	Harris	7 " 10 " = 239 "	"
7	Hayes	8 " 4½ " = 248 "	"
8	Peck	8 " 5½ " = 251 "	"
9	Lauwers	8 " 9 " = 265 "	"
10	Park, R.	8 " 9 " = 265 "	"
11	Payr	9 " ½ " = 275 "	"
12	Maydl	9 " 4 " = 284 "	Died 3 weeks later of inanition.
13	Fantino	10 " 4 " = 310 "	Recovered.
14	Monprofit	10 " 4 " = 310 "	"
15	Ruggi	11 " " = 330 "	"
16	Von Eiselsberg	11 " 8 " = 350 "	Death after 25 d'ys.
17	Obalinski	12 " 2 " = 365 "	Died.

In cases 9, 11, 14 and 17, from 8 to 30 cm. of large intestine were included in the measurements given.

This table was largely compiled from the tables of Payr, (*Archiv. f. Klin. Chir.*, Bd. 67, S 193,) and Harris (*New York Medical Record*, October 11, 1902, p. 566.)

It is interesting to compare these results, after removal of over 200 c.m. with twenty-five cases (taken from Harris's table) where from 80 to 196 cm. were removed. Of these but 16 recovered, while 9 died within a week after the operation.

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Henry de Mondeville, the Man and His Writings.

With Translation of Several Chapters of his Works.

By CHARLES GREENE CUMSTON, M. D., Boston, Mass.

(Concluded from March Number.)

Aside from the rules just mentioned one must also have recourse to other rules, which have been treated above in the first chapter, Tractus 2, on the Treatment of Ulcers, and he must select those which he will there find that are necessary for the art he is practising. From the definition mentioned with its explanations, from the divisions given, from the causes and reasons, from the above-mentioned general rules, besides some other things which refer to the above-mentioned matter, the educated surgeon can be sure to see almost the entire modus of how one should operate in general and in accordance with the rules of the art. This modus consists of four parts—namely, (*a*) the general evacuations or purgations; (*b*) of the special and diverting; (*c*) of suitable diet and conduct; (*d*) of local remedies and manual operations, according to the rules of art.

In order to render the fourth point clear five conditions must be noted: (*a*) it is to be remembered that each abscess from which a patient is cured has four stages—namely, the commencement, the development, the height, and the decline. The commencement of an abscess is taking place when some matter begins to distend and thicken a limb, and when positive disturbances of the natural functions of the diseased limb are first noticed, and when nature up to that time has not taken the matter of the abscess under her care. Growth exists from the beginning until the abscess has developed and ceases to do so, and as long as the force is weakened, and while the matter increases; then nature occupies herself with the abscess, but as yet does not successfully combat it. The height of an abscess I call that condition when the lesion neither increases nor decreases in size and when the natural force controls the diseased matter in some way or other. The period of decline is when the abscess commences to decrease and when the accompanying symptoms become milder until the lesion is healed or becomes transformed into some other affection, such as a fistula or an ulcer.

(*b*) It is to be remarked that any of these stages may remain latent for a certain lapse of time; thus the stage which we call

the beginning of the abscess may represent the beginning, middle or end of the process, for which reason an abscess may appear to be small for a long time. A similar statement may be made regarding the stage of growth—namely, that occasionally mucous abscess, botia, and tubercular glands and so on, grow continuously for several years, occasionally during the entire life of a patient, and thus the stage of increase has several periods. The same holds good for the height and the decline. If, therefore, in the beginning of an acute abscess, according to writers, local measures, dry, cold and styptica, should be applied, and if these do not cause improvement, and if since they do not counteract, the abscess grows, it is necessary to employ some dissolving remedies in conjunction. From this it follows that the nearer the stage of commencement is to the period of growth the less local cold, dry and styptical remedies are to be applied; on the other hand, the more advanced stage of growth, and the nearer it is to the period of the commencement of the abscess, dissolvents should be added in smaller quantity than repercussiva, and the further away it is from the stage of commencement, stronger dissolvents must be added in preference to the repercussiva.

The same holds good for the nearness or the distance of the height of the lesion relative to the stage of growth, and of the period of decline as regards that of the period of height, and thus the respective remedies must be added and, as the case may require, be added or reduced in amount.

(*c*) It is to be noted that the distinction above mentioned of the stages of abscess and the latent condition of any one of these stages must be considered if the surgeon is to proceed according to the rules and in a minute way. But it will happen occasionally that the process heals although the surgeon is heedless of what we have said, in which case the healing is usually neither good nor prompt and the result thus obtained is more to be attributed as an accident than to the skill of the surgeon.

(*d*) It is to be noted that the modus referred to for the regular healing of an abscess only applies to those lesions which do not suppurate, because suppuration does not belong to the four principal intentions of cure as will be seen from the abovementioned rules. And supposing that the treatment just mentioned would not suffice to cure an abscess, and that for some reason or some error, suppuration should supervene, the abscess

must be ripened as the case may require, and as will be shown later on when describing special kinds of treatment. A ripe abscess is to be opened, observing the rules and cautions enumerated in the chapter on the treatment of ulcers. When it is opened it should be cleansed, after which it must be dried out and the flesh to be renewed, and is to become firm after its removal, all of which is to be accomplished as laid down in Chapter I., on The General Treatment of Wounds, section 7, which discusses the treatment of acute abscess, and the bad condition of those suffering from wounds, as will be shown later when treating the special methods of the treatment of abscess.

The local remedies have, nevertheless, been treated in the present chapter, and also what is going to be mentioned in a separate chapter of the special methods of treatment, and will be found in the Antidotarium, to which the reader is referred.

(*c*) It is to be remembered that beside the professional treatment described, there is still another which is partly based on logical consideration, partly on experience, and which method has a wonderful influence on all abscesses, admitting that they have not as yet arrived at the point of suppuration, and which perchance, the ancients did not know, or which they did not desire to write on, because of its usefulness and easy application. When we are in doubt as to whether an ulcer will or will not suppurate, we should apply the following prescription at once both day and night. It consists of a plaster of marshmallow leaves with their stalks but without the hard stems, and rolled in oakum, moistened with water, boiled under ashes, and then carefully ground. Then from three to fifteen leeches should be applied, their size being selected according to the size of the abscess, the age and the strength of the patient, at one point one after the other, where nature appears to collect the largest amount of pus, and then this point is poulticed by means of hot water and is carefully dried. Then leaves of the leek which have been pounded or ground in warm olive oil, are spread over the abscess and a large area of the surrounding parts, and then a goodly amount of hemp-oakum should be spread over this in order to retain the heat. This is continued for three days with only one change; on the fourth day the plaster, as described above, is again applied and in the morning the leeches, and then the plaster of leek leaves is applied as before. Thus, the abscess with the treatment continuing alternately till the tenth day becomes ripened, is reduced considerably

in size, and in most instances will give exit to the pus without resorting to the knife or medicine.

And if an abscess appears ripe and does not open by itself, it should then be incised, observing the necessary rules. When the opening has been made a strip of lard is inserted, because that prevents the opening from closing up, renders the borders of the wound pliable, and thins the pus; thereupon an infusion of wheat flour should be applied with which water and a little oil is boiled to produce the consistency of dough, whereupon the said infusion is daily renewed with the application of the lard on top until a cure is effected.

Palliative Treatment.—As to its manner, usefulness and the question as to how many physicians quote it in their works, it may be said that it is similar to what is described in the preface to Oct. II., Tract II. Palliative treatment is to be recommended in three cases: (*a*) when the abscess is simply incurable, such as hidden cancer, or an abscess forms a tumor which arises in the nipple or the eye; (*b*) if the patient is desirous of being freed from the suffering of an abscess; (*c*) if the treatment of an abscess, for example old hemorrhoids, would necessarily be followed by a disease or some worse conditions, such as lepra, hydrops, or mania. The last rules regarding this manner of treatment will be described in a separate chapter.

Regarding the explanation of what has been said, and the subjects relative to them, eleven items are to be observed: (*a*) that abscess, tumor, protrusion or elevation, a thickening, or an unnatural swelling are one and the same thing, in other words, they are synonymical expressions. All that belongs to the species abscess, has many variations, such as exitura, pustula, and the like; (*b*) exitura is different from abscess and the rest, of which each can be applied to any unnatural tumor, whether it produces or must produce suppuration, or be it that such is not the case. But of exitura one only uses it with respect to acute abscess, or one that has accidentally become acute, after suppuration has arisen in it and not before, as will be afterwards mentioned in the chapter referred to. If you observe very marked pulsation or a lasting hardness or warmth, the abscess is then on the point of becoming an exitura. Until this it was nothing of this kind before the mentioned symptoms appear, and this is no abscess; (*c*) it is to be noted that bother and pustula are two different things, because

according to Avicenna, bother is a small protrusion or abscess, the entire collection of pus of which is situated outside the flesh, that is to say between the flesh and the skin, and is non-poisonous, while a pustula consists of poisonous matter which eats itself up; (*d*) what Avicenna says in Chapter V. on Complicated Diseases, should be noted: One must not assume that a walled abscess arises from the blood and bile, but is rather one which originates from some matter or other, whether this be warm by its own nature, or be it that warmth has been added to it because of an intervening decomposition, and it is quite permissible to divide these symptoms according to the division of the kind of every matter—namely, phlegmatic, melancholic, and the like; (*e*) it is to be noted that the expressions causa primitiva extrinseca and exterior antecedens, also intrinseca and interior, congestio and congregatio, derivatio and deligatio are identical; (*f*) this definition of the conceptions and terms is most important. Thus, Galen in the Fifth Book on Simple Remedies says: "An error in the things designated by name injures the patient very much . . . ," and he adds "physicians confound and spoil names, and not only the names themselves but also the knowledge of the names and things; (*g*) it should be noted, according to Avicenna in the chapter referred to that abscess is a composite disease, that is, in an abscess one has various kinds of diseases — namely, (1) an unfavorable diathesis, because there will be no abscess unless the humors are defective; (2) defective form, because no abscess will arise without an injury to the outer appearance or without a swelling, a lesion of continuity, since the pus of abscess is imbibed between the parts of the diseased limb and so severs the continuity of the parts; (*h*) it is to be remembered that an abscess is a disease which effects equal parts, equal functions or the entire body. It is a morbus consimilis, because it occurs in similar parts—namely, bones, nerves and muscles; officialis, because it effects limbs of equal functional importance, such as the hand and foot; communis, because it can occur in all members excepting the heart, which on acccount of its importance cannot undergo abscess formation; (*i*) according to Avicenna, in the chapter referred to, the bones are affected by a disease which resembles abscess and the like, because all that takes nourishment will also take a superabundance of nutritive material, such are the bones; superabundance of nourishment, however, is not

abscess, etc.; (*j*) Galen in his Tegni places the manner of origin of abscess as follows:

To any one part humors flow, or what comes to the same, they remain in it for its proper nutrition, the member becomes tense, its veins, even the very smallest, are gorged, so that matter which did not previously exist there is present, as may be seen in a tumor of the conjunctiva of the eye; afterwards they leave the veins and enter into the hollow spaces of the parts and are left there by nature, etc.

The manner of origin of pus is described by Galen in his fifth book on Internal Diseases, and in the commentary to the second part of the Aphorisms on the Origin of Pus:

That which is pus or poison, or putrid matter, dirt, scabs, crusts, and the relations of each other and from which matter, which is their effect and in the manner which each is created, all that has been said in the chapter on the Treatment of Ulcers and in the explanations, is to be noted that the disease can be called communis for three reasons: (1) because it attacks all members at the same time at once, as fever does, for instance; (2) because it comprises every kind of disease, inasmuch as it affects similar and general tissues of equal functional importance, and includes to the same extent abscess, scabies, pruritus, serpigo, and similar affections; (3) because it can originate in single organs, such as wounds and ulcers.

Such is the literal English version of the chapter on Abscess and its Treatment, although I must offer an apology for the very rough translation that has been given.

De Mondeville's remarks on the prognosis of wounds are most interesting in many respects, and show the progress made in surgery at the time of his writing. He says that according to the views of ancient writers, a wound whatever may be its character was considered as either absolutely fatal, usually fatal, or not fatal, and that according to Theodoric a wound is either absolutely fatal, not absolutely fatal, or not at all fatal. He then goes on to say that those wounds which the ancient physicians considered as usually fatal, and those considered not absolutely deadly, or not fatal by Theodoric, he considered as not fatal, or at least less dangerous than did his predecessors. He also says that he, and perhaps Theodoric also, considers no injury as absolutely fatal, excepting one which kills the patient before he has been able to take any food, provided that no mistake in the treatment has been made, and he states that if the wounded patient has survived an hour and has partaken of some nourish-

ment, his wound will not kill him unless some mistake in the care of the patient is made.

He points out that all wounds of considerable size, and wherever situated, are usually fatal if they are looked upon and treated according to the methods of the older surgeons, and that it is a peculiar fact that he learned by many years of experience in Paris that flesh wounds of the head, without injury to the bone, are usually fatal, perhaps more frequently than when fracture of the skull occurred at the same time. He explains this by the fact that when the skull is injured, a considerable amount of brain substance becomes evaporated, thus relieving the brain itself in many respects.

That de Mondeville was a sagacious clinician, is shown by his remarks on the general condition of patients, for he points out that some people have a great power of resistance and shows that some quite dangerous wounds will be recovered from in a robust habit, which otherwise would end fatally in a weakly constitution. Wounds of the heart, no matter what their size may be, are always fatal, because this is the most sensitive organ and its normal action is a fundamental condition for the existence of life; and whent his organ is wounded the spiritus and heat and the humors mingle together and produce an ulcer. An insignificant wound becomes most important when seated in a vital organ. If, therefore, a wound reaches the interior of the heart the patient will immediately die, while if the wound be only superficial the patient may live one day but will surely die in the end, because the accumulation of the humors will give rise to an inflammatory ulcer invariably resulting in death.

Injuries to the bloodvessels which extend as far as the digestive tract or the organs of respiration are also absolutely fatal because the blood will escape from the inside of the body through the mouth and the hemorrhage cannot be checked. This is likewise the case of wounds to the trachea which extend as far as the cartilaginous part of the organ, because this latter tissue is dry and on account of its great hardness and dryness union cannot take place. Wounds of the esophagus, pericardium, the stomach, gall bladder, the intestines, especially the jejunum, the uterus, the fundus of the bladder, are fatal if they extend into the interior of these organs, for the reason that they are very rich in nerves and are dry, so that union cannot take place. He also points out that the pericardium and diaphragm are in constant motion, while the intestines and

esophagus are subjected to a constant irritation, producing movement, thus preventing healing from taking place.

As absolutely fatal he also considered vast traumatisms, such as amputation of the leg, or crushing of a limb, especially the thigh, and he attributes the mortality in these cases to the vital strength not being sufficient to permit of the healing of such large wounds; but if the strength were sufficient the patient would recover, provided that no important organ were injured at the same time.

De Mondeville says that superficial injuries of vital organs, excepting the heart, no matter how large or severe they may be, are not necessarily fatal if they are treated according to the rules laid down by Theodoric, the reason being that the vital strength is preserved until healing has taken place.

Speaking of wounds of the brain, which appear to be particularly fatal, Theodoric says that he saw a man recover who had lost about a third of the posterior part of the brain, and the patient who was a wood carver lost none of his artistic qualities. De Mondeville says that he has many times removed shot from the brain, and that all the patients recovered. De Mondeville advocated dry dressings in most cases when the wound was fresh, but when he had to deal with one which was already suppurating he first purified it by means of certain remedies, and he points out that no healing can take place until the production of pus has ceased.

After the wound had been rendered clean he applied stimulating and healing remedies.

The first chapter of the third treatise, which treats of incisions, was written before 1314. The remainder of the third treatise was composed after 1316, which was the date of the death of Louis le Hutin, mentioned by De Mondeville. It took our author three years to compose this third treatise which has remained unfinished, and consequently would make the date from 1319 to 1320. Fearing that he would not be able to finish his work, de Mondeville did not complete the third treatise, but composed the fifth, the Antidotarium, because he considered the latter more important.

The complete or fragmentary manuscripts of de Mondeville's surgery number in all eighteen, but to these manuscripts still one more must be added which today is found at the Laurentian Library, at Florence, and contains the provencal translation of de Mondeville's abridged anatomy, reproducing the course of

lectures which he delivered first at Montpellier in 1304, and I here append the introduction of this provencal translation as given by Dr. Bos.

Comensa lo prologue de la notomia de la Surgia de Anric de Mondavilla.

Al comensamen d'aquesta obra, que es tracha de lati en romans dea la Surgia de Anric de Mondiviala, deves premieyramens saber que es subjet en tota surgia . . .

Lo premier es de la notomia coma defendemen de Surgia.

Lo segon es de la cura universal de plaguas et de concutios. Lo ters es de curas de totas malautias que non son pas plaguas ni ulceracios ni malautias de foras las quals venon comunamen a totz los membres del cap entro als pes.

Lo quart es de la cura de la strenquaduras et delogaduras et cossemens et plagamens.

Lo quint es l'antitotari.

Et a me sembla que Vicenna es pus savi en la notomia; et Tederic en la cura de las plaguas et Alofranc en la cura de las ulceracios et de las autras malautias procezen trop ben davant tot autres surgies.

Lo premier tractat d'aquest libre que tracta de la notomia est devisat en XII. capitols principalmen et per orde.

This small number of complete or fragmentary manuscripts, nineteen in all, of a manual composed for students and practitioners, appears to show that the work of de Mondeville did not have any great success. It was nevertheless a good manual, giving the status of the knowledge of his time, but it was incomplete and had as a competitor the almost contemporary work of Lanfranc, whose teachings had had perhaps a greater vogue and whose treatise on surgery had already been completed.

Like all works which are put aside as soon as science has made some little progress, the treatise on surgery by de Mondeville had only a short existence, and the work by Gui de Chauliac caused the name of de Mondeville to be completely forgotten, but to him will ever be attached the honor of having been the first French surgeon who wrote a book on surgery. But this was not his only merit, as I shall endeavor to point out in what is about to follow.

There is every reason to believe that de Mondeville was instrumental in founding the College of Surgeons, which truly was the work of Pitard, and he was obliged to use his influence with the King of France, and with Prince Charles de Valois, in order to complete this useful work.

It was at about the time when he returned to Paris in 1306, that de Mondeville put into execution the project that he had conceived some time past, to write a complete treatise on surgery for his students. He was a persevering worker and most intelligent, and he had read and meditated on all the works of the most celebrated surgeons of his day, the names of whom I have already given. He had seen the practice of several of these noted men either at Montpellier or at Paris, and under the directions of his master, Pitard, he became familiar with all the operations.

De Mondeville had already taught with great success, and had a profound knowledge of the ancient sciences and the best Arabian writers, and while in Italy he had heard the lectures of the most renowned surgeons.

Nothing in his education was wanting, and besides talent he had an independent turn of mind, exempt from all cupidity and envy, contenting himself with simply the necessaries of life, and being a bachelor and consequently not obliged to look after the necessities of a family, he found that he was not even able to carry out the editing of his surgical treatise. He believed that his work would be all the more opportune because he found, as he says, that the surgeons of his day were disposed to serious study, and he was in hope that his treatise might be conducive to their desire for learning.

De Mondeville's life was well filled. He taught surgery and anatomy in Paris before a large assemblage of students and persons of distinction, and as I have already said he was the surgeon to the king and to the army. But the occupations and his deplorable condition of health prevented him from fulfilling the vast program that he had laid out for himself. In a few years he completed the first two treatises of his work which he read in 1312, "Publice, absque collecta, cum scholorium medicianae et aliorum aliquorum intelligentium maxima et nobilissima comitiva civium, curialium et pertranseuntium advenarum." But he soon received an order to follow the army commanded by the king's brother, Charles de Valois, which was to go to Arras and to England, and he was obliged to bid good-bye to his students and his much cherished studies. However, at his entreaty the king allowed him to return to Paris before the end of the expedition, and he was thus enabled to again take up the work which was the principal charm of his life.

He commenced the third treatise of his work and finished the first two sections, when at this point he was again obliged to stop on account of his bad health. In a melancholy state of mind he wrote the following touching words regarding his condition:

Non cyrurgicus se exaltet, sed timens Deum qui amicus sapiens est, confidat de ipsius maxima largitate et suae plenituvine potestatis, sub quibus, quasi miraculose et de gratia speciali, eanguidus vivo et jam vixi continue per duos annos contra commune judicium medicorum. Rogans, insuper et supplicans Creatorem, ut sicut ipse Ezechiae regi vivendi spatium prolongavit, ita et vitam mihi prolunget, si placet, ad profectum commune, donec deintaxat, possim perficere opus peresens ut ad ejus complementeum concrescat ut pluvia, doctrina mea, et fluat ut ros, eloquium meum.

He hastened to trace in outline the titles of the chapters comprising the third part or doctrine of the third treatise that he intended to compose, and to outline the fourth which was given up to the study of fractures and dislocations. And, lastly, as I have already said he began to edit his Antidotarium. Although both phthisical and asthmatic he was able to finish this important therapeutical treatise. Such, in a few words, are the principal points in the life of this excellent man.

The first treatise, as I have already said, is given up to the study of anatomy, particularly that which applies to the practice of surgery and what would at the present day be termed regional anatomy. De Mondeville says that it is quite sufficient for him to treat briefly grosso modo the anatomy of the human body, nec intendendo ipsam radicitus nec ad unguem, but to consider it in its relation to surgery. It is very doubtful whether or not de Mondeville had dissected, because in his day this practise was extremely rare. But the illustrious surgeon of the King of France says that he first had had the idea of joining to his anatomical descriptions a certain number of drawings which would speak to the eyes, and thus impress more deeply in the memory the elements of a science which is so indispensable both to physicians and surgeons. It was, however, necessary to wait the advent of that great genius, Vesalius, aided by the artists of the Rennaissance, to see the great surgeon's idea bear fruit. The drawings that de Mondeville has left us are extremely small and of only slight value, and it is probable

that for the illustrations of his lectures he must certainly have had more correct and more expressive plates.

The second treatise of de Mondeville's works is consecrated to the study of wounds, contusions and ulcers, and was the object of his particular attention. It is preceded by a preface and long prolegomenon under the title of, Notabilia introductaria ad totam cyrurgiam.

The following lines regarding required qualities of a surgeon are in truth remarkable. He says:

The surgeon if he is desirous of operating well, should in the first place frequent those places where talented surgeons often operate; he should apply his entire attention to their manner of acting and fix it in his memory, then to exercise himself by operating under the guidance of his venerable masters. The surgeon must be endowed with a natural genius, because it is dangerous to operate when only guided by what is written in books, without consulting one's own proper inspiration and a sound judgment. Ingenium naturale adjuvat artem et naturam regentem. Necessarium est cyrurgicum fulgere ingenio naturali . . . He is not a good surgeon who does not know the art and science of medicine and especially anatomy . . . The surgeon should be fairly audacious; should not discuss questions before the laity; he should operate with prudence and sagacity; he should never commence perilous operations unless he has provided everything in order to avoid danger; he should have a well made hand, the fingers long and slender, supple and sure. He should promise health to all his patients; he should not conceal from the parents or the friends the dangers that may arise; he should avoid as much as possible difficult cures; he should never undertake hopeless cases; he should give the poor gratuitous care; if possible the rich should pay well; he should not sing his own praises; he should not cover his colleagues with blame; he should not cause envy among them; he should work always with the idea of acquiring a reputation of probity; he should be reassuring to his patients by kind words and acquiesce to their requests when nothing harmful will result from them as to their cure. . . . From all this it follows that the perfect surgeon is even more than the perfect physician, and that the former has need of a condition which the second may not possess—namely, manual dexterity.

His introduction to surgery is less a discourse than a series of twenty-six articles classed under the head of Notabilia. Under this heading our author considers a large number of points of great interest for the history of the art and practice of surgery in the middle ages, such as the conditions necessary for becoming a good surgeon, remarks on quackery and

empiricism; the relationship between physicians and surgeons and a large number of other questions relating to medical ethics.

It is well known what enmity there was between physicians and surgeons at a later period in the history of medicine, and dating from this time the fight was continued, and many were the debates which had for object to decide what diseases should be treated by the surgeon and what by the physician. It was finally decided that wounds, abscesses, ulcers, hemorrhoids, various skin diseases, all external affections of the head, arms and legs, the seat of which could be discovered, although external appearances were absent, such as pains of the joints and hands, deafness, decreased vision, etc., should belong to the domain of surgery and should only be treated by surgeons.

As to internal affections of the head and those arising in the thorax or abdomen, excepting perhaps dropsy and a few other similar affections, it was decided that they should be treated by physicians only.

Henri de Mondeville was opposed to the brutal separation of surgery from medicine, as well as against quackery and the pretensions of the clergy, and all abuses which at this epoch dishonored science.

His treatise on wounds is without doubt the most important and interesting part of his writings.

Immediate ligature, which was indefinitely indicated by Celsus and Galen, will be found perfectly described by de Mondeville, who in no way claims the idea as his own, but gives all the honor to Lanfranc. This method of ligating was usually employed when other means of hemostasis had failed. The skin was incised so as to expose the wounded artery, which was then drawn out with a hook or pincers, and then according to the text the vessel was twisted. It was then tied and the borders of the wound were brought together by sutures, allowing the ends of the ligature to be brought out. The ligature was removed as soon as granulation tissue had developed to an advanced degree. It was only reserved for Ambroise Paré to apply the ligature of arteries in amputations. De Mondeville expressed badly founded ideas of the success of this method, because he was unacquainted with the phenomena of the spontaneous dropping off of a ligature, and he says:

Either the ligature falls off before the wound is filled up by granulations or, on the other hand, it only comes away afterwards.

In the first instance the blood continues to flow, while in the second the ligature can only be removed by an incision made in the regenerated tissues.

He describes fistula in ano with much care, and distinguishes two kinds, internal and external. The operation for fistula with an internal opening into the rectum, he describes as being accomplished by gradual constriction with a lead wire, or by section with the knife, guided by the finger in the rectum, or a canula of wood. This method has been little improved on since this time.

In his chapter on amputation of limbs, which in his day was avoided as much as possible on account of the fear of hemorrhage, he mentions the question of putting to sleep the unfortunate patient in order to avoid the pain of the incision, and I here give the exact Latin text of what he says regarding this:

Suntque (chirurgici) dant medicinas obdormitivas, ut patientes non sentiant incisionem, velut opium, succus morellae, hyosciami, mandragorae, cicutae, lactucae. Imbibunt in eis spongiam novam, et permittunt eam ad solam exsicarri; et quando erit necesse, mittunt illam spongiam in aqua calida, et dant eam ad odorandum tantum usquequo patientes capiant somnum. Et postea, cum alia spongia in aceto infusa, naribus apelicata expergefaciunt et evigilant eos.

This wonderful method of inhalation of anesthetics that the physicians of antiquity had already thought of, is consequently found distinctly expressed in the 13th century, but it took 600 years more for the realization of these dreams to be put into execution.

De Mondeville should surely occupy one of the highest places among the surgeons of the 13th Century, not only for the priority of many things, but from his talents and the high position that he occupied both socially and as a teacher. Educated in a healthy philosophical atmosphere, the mind enriched by the perusal of the best writers of antiquity, learned in medicine, familiar with both practical and theoretical surgery, surgeon to the Court of France, an enemy to quackery, a man of science, above all with an independent character, de Mondeville appears to us as one of the greatest glories of this epoch.

It is probable that de Mondeville was the first to demonstrate that the formation of pus was not necessary for the cicatrisation of wounds, and he thus may be said to have a priority of 600 years over the practice of Lister. Although

there is a great space of time separating de Mondeville's method and the modern practice of asepsis and antisepsis, there was also a long lapse of time between his practice and those of the ancient surgeons. He was a pioneer in this direction, but other more complete and scientific works were necessary in order to prove in the minds of men the truth of his teachings.

871 Beacon Street.

SPECIAL ARTICLE.

Rudolf Virchow.[1]

An Appreciation.

By CHARLES A. L. REED, M. A., M. D., Cincinnati, O.,
Former President of the American Medical Association.

THE object of this address, the invitation to deliver which is an honor for which I am profoundly grateful, is to express, in some measure, an appreciation of the life and labor of Rudolf Ludwig Karl Virchow, a deceased honorary Fellow of the Medical Society of the State of New York.

THE ESTIMATE OF GREATNESS.

In approaching this task, we become at once impressed with the fact that the influences which develop greatness are subjects of speculative inquiry, not less interesting and important than the momentous question of what constitutes greatness itself. When, therefore, we for any reason examine into the facts relating to the evolution of a given historic character, we at once think of the conditions and forces concerned in its production—we think of ancestry, of domestic surroundings, of scholastic opportunities, of personal associations, and of the forces that were at the time dominant in the social, political and intellectual atmosphere. We are prone, also, as we turn to greatness itself, to measure it, not alone by the standard of its own time, not alone by the rule of personal achievement, but to estimate it with reference to both its immediate importance and its final influences. Thus, as we glance over the vista of history, and our fancy nestles, naturally enough, about the most imposing

1. Delivered before the Medical Society of the State of New York at Albany, January 28, 1903.

figures of the ages, we discover, for instance, that we would like to be better acquainted with the parents of Julius Cæsar—the man of action; that we would like to know more of John and Mary Shakespeare, who blessed mankind with the Bard of Avon—the man of sympathy; and we yearn for an acquaintance with the farmer of Woolsthorp and his wife who begat the illuminating genius of Newton—the man of mind. We feel, also that, full as are the annals, we would like to know even more of the actual political forces of the Roman Empire, directly concerned in developing the world's greatest soldier and statesman; that, notwithstanding its rich literature, we would like to feel the sentient throbs of the Elizabethian epoch that made possible the world's greatest poet and dramatist; that, voluminous as is the record, we would like to be more familiar with the trend of scientific thought during the century that followed and that produced the world's greatest philosopher. We search for the reason why each of these names has been engrossed upon the scroll of immortality, and as we search we discover that everywhere lies the unknown; that, in atom and planet, in germ and genus alike is law, natural law, inherent and integral, whose essence is not and cannot be of the record; that these men have delved and found and revealed laws,—laws of war and statesmanship, laws of human emotion, laws of the natural universe,—and that man is stronger and better and happier because they lived. We discover, furthermore, as we glance over that immortal scroll, that each name inscribed thereon, has been placed there because its possessor, whether Pythagoras or Euclid, Copernicus or Kant, Galileo or Herschel, Hippocrates or Harvey, whether Dante or Goethe, each has been recorded because each has torn away the veil and revealed somewhat of the law that was hidden; for the law is in all and of all, and he is the greatest among men who reveals the most of law unto man. In this spirit let us approach a discrimination of the great savant whose demise was the melancholy event in the medical, the scientific, and the political world during the last year.

THE YOUTH OF VIRCHOW AND ITS ENVIRONMENT.

The Second Peace of Paris had been signed but a few years when, in 1821, Virchow was born in the little hamlet of Schievelbein in the flatlands of Pomerania. The Baltic breezes that swept inland on that fifteenth day of October were not, however, sufficient entirely to cool the political atmosphere of that north-

ernmost Prussian province, or, for that matter, of the thirty-nine petty states that then comprised the German Confederation. Napoleon's exile had terminated with his death at St. Helena, but six months previously, and Europe,—Germany in particular, —relieved of the depressing shadow of his overlordship, was busying itself with the always serious problems of reconstruction. The intellectual world was not less perturbed than was that of politics. The great universities, then as now, exercised a powerful influence upon the trend of events. It was in them that the battle for constitutional rights, as a remedy against the despotism of the petty princes, was waged with intensest vigor. A constitution had been granted and revoked in Wurtemburg; the Duke of Weimar had granted a constitution to his subjects, the celebration of which event, at Jena, had led to patriotic demonstrations, and to a revival of the influence of Luther's great struggle for liberty of thought. The movement, thus engendered, had become so formidable, as to invoke the oppressive antagonism of the tyranous Metternich, manifested among other things by the promulgation of the infamous Carlsbad decrees, which provided for the rigorous censorship of the universities and newspapers by government commission. Their provisions involved the suppression of any newspaper and the exile of any man who might express opinions inimical to the policy of the government.

The same interference with free thought existed in Austria and Lombardy. The students of the University of Turin had been massacred because they had appeared at the theatre in red caps. France and Spain were in a state of unrest, and in the countries of Europe—the people—from the Mediterranean to the Baltic, the effort was being made to conform human life to those inherent laws of the social fabric that most make for happiness. The effort to reduce these laws, natural, inherent laws, to definite terms; the effort to adjust habits and customs to new ethical rules and to new constitutional provisions, produced a state of mental activity and of moral daring in every part of Continental Europe. This, then, was the social, political and intellectual atmosphere that prevailed in every German home, even in the home of Karl and Johanna Virchow, as they rocked the cradle of him, the formal appreciation of whose long and illustrious life is the object of our solemn reunion at this hour.

The clamor against absolutism was heard in childish murmurs at the public school at Schievelbein, to which young Vir-

chow went at a tender age. There, in the little town in which the Reformation had long been the dominant force; there, in the little school beneath the shadow of the church, the synagogue and the Castle of Malta,—a combination that in its catholicity was almost prophetic,—the youth encountered forces that were potent in fashioning his subsequent illustrious character. It is this fact that we, in free America, where the schoolhouse stands as the temple of rational belief, where it stands as the safeguard of the republic, may take peculiar satisfaction.

FORMATIVE INFLUENCES OF VIRCHOW'S CHARACTER.

The political agitations of the times, the little rivalries, the little hatreds, the fierce combats of the public schools, were not, however, sufficient to divert the youthful pupil from the successful prosecution of his studies; for, we learn that he went, under age and with a particularly advanced knowledge of Latin, to the gymnasium at Koslin, where he was a source of surprise to the directors. Here at Koslin, again, was the spirit of the Reformation, with its inspiration of truth and liberty, and its yearning for happiness. The fact was recognised even as far north as Pomerania, that, in the Rhenish provinces, previously ruled by French officials, there was a higher idea of human rights than obtained in the other provinces of the confederation, especially under those ruled by the powerful house of Brandenburg. There was, therefore, a clamorous appeal for the recognition of all that was attractive and great in the principles of the French Revolution, and the outcry for a constitution, embodying these principles, came from no province with more emphasis than from Pomerania, and from nowhere in Pomerania with more insistence than from Koslin and from Schievelbein. The revolution of 1830 had brought coveted charters of liberty to Brunswick, Hanover, Saxony and Hesse-Cassel, while to Prussia it had brought only the farcical concession of a system of triennial, provincial diets with merely consultative powers. In spite of these distracting influences, however, influences that are always alluring to the enthusiasm of youth, young Virchow passed from the gymnasium in 1839, first on the list of the *Abiturienten*. The independence by which industrious and ambitious youth refuses to be restrained within the confines of an arbitrary curriculum is always the prophecy of a broad manhood. The child, in this instance and by this rule, was, indeed, father to the man, for we find that he presented himself for his finals, not only in the

required branches, which were difficult enough, but in Hebrew, which he had mastered from pure love of philologic research. It was this same impulse that prompted him, during the succeeding few months, to master Italian without a teacher, just as, years later, we find him resting himself from his scientific labors by delving into the charms of modern Arabic poetry.

VIRCHOW AND JOHANNES MÜLLER.

A few months after leaving the gymnasium, he set out for Berlin, a journey, which, in those days, before the introduction of railroads, had about it more of adventure than is involved in the two hours' run of today. Of his career as a student in the Friederich Wilhelm Institute, it is sufficient to say that he was an arduous student. In the faculty then were Dieffenbach, the foremost surgeon of the day; Schönlein, who had come from Zurich the same year to join, not only the teaching body, but to act as reporting council for the ministry and to serve as physician-in-ordinary to the King; Froriep, who was in charge of the Pathological Museum at the Charité, and who, in addition, served the government as medical counsellor; Casper, who was also a medical counsellor, with a seat in the medical deputation for medical affairs in the ministry; but, towering above all was the intellectual figure of Johannus Müller, the professor of physiology. He was an original genius, with daring, actually engaged in winnowing the wheat of demonstrable truth from the then prevailing chaff of egoistic opinion,—to divorce a physical science from speculative philosophy. Prompted by the inspiration which he in turn had derived from Bichat and the French School, this professor of physiology was busily engaged in retesting in the laboratory truths previously elaborated by Haller, Whytt, Spalinzani and Bichat himself.

My fancy likes to dwell upon the almost dramatic moment when the shopkeeper's son from Schievelbein, the little keen-eyed, yellow-haired stripling of 19, was ushered into the presence of this, the great founder of the modern school of physiology. There was in that meeting an intellectual impact that resulted in the transference and the perpetuation of great thoughts, great methods, which, perfected by the pupil, led to still greater results. It was from this great professor that Virchow, during the next four years was to derive those habits of investigation which, coupled with the spirit of daring, was to make him in turn the leading investigator in the realm of biological research.

It must be remembered, however, that with all its social and political disturbances, Germany was at that time thoroughly impregnated with a wholesome ferment. It consisted of the spirit of rational investigation, and was infused by Liebig in chemistry; by Humboldt, who was promulgating his discoveries leading to the publication, five years later, of his Cosmos; and by Froebel, who was establishing his marvelous principles of education derived from Pestalozzi, and which have since borne rich fruit the world over in every department of human instruction.

VIRCHOW'S EARLY RECOGNITION.

It is not surprising, therefore, that, with these antecedent influences, with these present surroundings, with these dominating forces, and with his marvelous insight and industry, Virchow should make such a record as a student, that upon his graduation he was given the assistantship to Froriep, the Prosector of the Charité Hospital. It was his first recognition, and it came with deserved promptitude.

He was actuated at this time, as in his entire subsequent career, by the broadest principles of catholicity. During his student career, in addition to the prescribed lectures, he had gone into logic and psychology; in his busy energetic way, he had mingled with the political organizations among the students, and there were already manifest tendencies which, a few years later, brought him before the German public as a scientist, a philologist, a social reformer, and a democrat. Promotion came without undue delay. Froriep resigned as Prosector in 1846, and Virchow was elected to the succession. His work with Müller, however, had brought him in contact, not alone with that great man's scientific method, but with his habits of publicity, as a scientific writer. The *Archiv. f. Anatomie, Physiologie u. wissenschaft Medicin*, long issued by Müller, soon found an imitator in the department of pathology in the periodical issued jointly by Virchow and Reinhardt, and which, on the demise of the latter, Virchow continued to edit until his death. The political and economic conditions were fashioning themselves into the Revolution of 1848, when Virchow, already in influential touch with the Prussian Government, was delegated to investigate an epidemic of typhus fever which was then raging in upper Silesia. The work was done with his characteristic thoroughness, transcending the prescribed limit of his instructions. He not only investigated the pathological and

clinical phases of the disease, but he entered freely into a discussion of the hygienic, economic and social conditions underlying the epidemic. He even went so far as to indicate a number of social reforms, essential to the prevention of such epidemics, and tinctured his science with considerable democracy, his outspoken utterances in these particulars causing a distinct sensation in the ministry.

VIRCHOW'S POLITICAL ACTIVITIES AND HIS BANISHMENT FROM BERLIN.

The trip to Silesia seems to have been a very important experience in Virchow's career. His previous tendencies as a reformer, in the direction of popular liberty, were now fully confirmed, and he became an active participant in the great revolutionary movement of that year. He unhesitatingly promulgated his platform as that of full and unrestricted democracy, on which theme he made violent speeches to the Berlin populace by whom he was elected a member of the national assembly. His political ambitions, however, were destined to be temporarily curbed by the fact that he was under the parliamentary age, and was, consequently, not permitted to take his seat. His energy, however, found a compensatory outlet, for, with Leubuscher, he founded a journal which they called *Die medicinische Reform*, through which he advocated the establishment of a ministry of health, and insisted, among other measures, that medical education should be made free. These suggestions, not originating with the government, were scarcely less distasteful to the ministry, than was his report from Silesia, or than were the political harangues which he continued to pronounce to the plaudits of his fellow burghers. He seemed at this time to be largely dominated by the spirit of iconoclasm, not, however, that form of iconoclasm which is merely an expression of the spirit of destruction, but that better iconoclasm by which old gods are destroyed that newer and better ones may be erected. He invaded the realm of theology and proclaimed, not a mere agnosticism, but a positive disavowal of the existence of a Hell, insisting that "only a benighted Mecklenburg pastor could be so foolish as to believe in a Devil." The government, committed not only to the task of maintaining the National order, the National laws, but the National religion, looked upon the young orator as a dangerous polemic. He was, accordingly, compelled to resign his appointment at the Charité, where, in spite

of all his political agitations, he had conducted epoch-making researches on leukemia, embolism, thrombosis, phlebitis, and other phases of morbid anatomy. He had already become a teacher of ability, and his researches had attracted widespread attention. These facts, quite as much as the influence of his colleagues at the Charité, probably saved him from the decree of exile, issued at that time against many participants in the Revolutionary movement. He was, however, banished from Berlin to Würzburg, where, in May, 1849, he accepted a chair in the faculty of the university. There was here less opportunity for effective participation in the political movements, and his energy found fuller exercise in the prosecution of his original researches, and in the exercise of his philological tastes.

ACTIVITIES AT WÜRZBURG.

During the seven years that he remained here he kept up his study of Italian, Arabic, and acquired a knowledge of English. His scientific researches at Würzburg embraced the subjects of phthisis, tuberculosis, typhoid fever, cretinism, hydronephrosis, adipocere, echinococcus of the liver, amyloid degeneration of lymphatic glands, the corpuscles of bone, cartilage and connective tissue, and he thoroughly investigated the anatomy of the nails and the epidermis. *Die medicinische Reform* was discontinued shortly after he went to Würzburg, but the young professor, instead edited a *Handbuch der speciellen Pathologie*, and, in connection with J. Vogel, issued a manual of general pathology.

RECALL TO BERLIN.

It seems from careful study of Virchow's career that it was at about this time that his observation of concrete facts had become sufficiently extensive to justify him in venturing upon important generalisations; for the little manual issued in connection with Vogel contained many of the fundamental principles which, a few years later, were elaborated into his *Cellular-pathologie*, published in 1859. He had been recalled to Berlin in 1856, under circumstances that invested the incident with the characteristics of a triumph. The chair of general pathology had become vacant through the resignation of his former teacher, Froriep. In all Germany there was none so able to fill it as the young democratic professor. He was sent for—but paused to consider. When his reply came it brought his acceptance, based, however, upon the condition that an institute for

practical work should be founded. His terms were accepted, not only in this, but in other particulars, and he at once entered seriously upon what must be recognised his more distinctive life work. The Museum at that time contained 1,500 preparations; at his eightieth birthday, as the result of his own individual labors, the number had increased to 23,000. In his work he was actuated by the view, expressed in his own words that, "the rôle of pathological anatomy as a dogmatic science is at an end; for each individual law we must have the proof, clearly recognised and carrying personal conviction." He insisted that the whole of the then existing system must be abolished, and that a new philosophy, based upon observation and experiment, must take its place. This new pathology, he insisted, must come about gradually, and not as the mental product of individual enthusiasm. It must be achieved as the outcome of laborious research by many competent investigators, and, when thus evolved, and thus only, could it be accepted as the basis of scientific medicine.

VIRCHOW AS A LEGISLATOR.

The engrossing character of Virchow's labors at the Institute at this time, the absorbing enthusiasm involved in the promulgation of a new and revolutionising philosophy, the exactions of editorial duty, all combined with the responsibilities of professorial work, were not sufficient, however, completely to divert his attention from collateral and often apparently irrelevant studies, and from participation in the fierce political controversies that were then agitating the German people. William I. had ascended the Prussian throne in 1858. There was some hope of relief from the oppressive measures of his predecessors, and this very hope stimulated the activities of the Democrats, or of the "Demogogen," as the party was opprobriously designated by the Conservatives. Virchow, notwithstanding his unpleasant experiences that had resulted from his banishment to Würzburg, immediately identified himself with the cause of popular liberty. In this he was actuated by a profound contempt for the reigning house, a contempt which, on occasion, found expression in his famous observation on heredity. "I know a family, a very exalted one," he was wont to say, "in which the grandfather had softening of the brain, the son hardening of the brain, and the grandson no brains at all," the reference being to the three Frederics, the immediate pred-

ecessors of the then reigning monarch. The work of the mere agitator, however, was not sufficient for one of Virchow's temperament, particularly to one who, after a previous election to the National legislature, had been denied his seat on account of his youth. He was, in 1862, older by fifteen years, and, accordingly, offered himself as a candidate for the Prussian chamber, to which he was duly elected. It was in the same year that Bismarck became Prime Minister, a coincidence which marked the beginning of an antagonism that continued throughout the political careers of the two men.

Virchow speedily became the leader of the Radical party, and by his advanced views and cogent reasoning, and by his courageous insistence upon them, speedily earned for his policy the opprobrious designation of "Professorismus," applied by the Iron Chancellor. While these debates were going on, the duties at the Institute, at the Charité, and at the editorial office were not neglected, although there is ample testimony that Virchow was often tardy in keeping his appointments. The famous Schleswig-Holstein episode diverted for a time the attention of the legislature from internal to external affairs, and culminated in the war with Denmark in 1863. In this war, Bismarck, against Virchow's opposition, used Austria as the cat with which to pull the chestnuts from the fire, and then, three years later, again over Virchow's opposition, he proceeded to kill the cat. As a result of this war with Austria in 1866, the Germanic Confederation of 1815 was terminated, and the North German Confederation took its place. It may be premised that Virchow, who, with all his democracy, was always a Unionist and a Nationalist, deprecated this segregation of the Germanic people.

VIRCHOW AND BISMARCK.

It was in the course of this long sustained opposition to the policy of the Government that he, as chairman of the finance committee, a position which he held for many years, succeeded in defeating an appropriation for naval purposes that had been demanded by Bismarck, who, thereupon, challenged his successful antagonist to mortal combat. Virchow, with no disposition, whatever, to give the Herculean warrior an opportunity to exercise his professional skill, and with moral courage to stem the tide of sentiment in favor of duelling that still disgraces Germany,—a courage vastly excelling mere physical bravery,—

declined the cartel, but continued his opposition. This opposition was carried along through the days of the Franco-Prussian War, but when the first shot had been fired, Virchow, always a patriot, and always the physician, took his son and joined the army, the two serving in the capacity of surgeons in the field. These men, father and son, did their full measure of duty, conspicuously upon the field of Metz, in alleviating the sufferings of their wounded compatriots. No sooner, however, had peace been concluded with the proclamation of William I. as Emperor, at Versailles, than Virchow resumed his wonted activities in science, in literature, in politics at Berlin. It was then that, probably for the first time in his political career, he found himself *en rapport* with the leading features of Bismarck's policy—namely, the policy that involved the construction of the German Empire. It may have been this particular fact, quite as much as a general appreciation of Virchow's work, that prompted Bismarck, before his own retirement under the present Emperor, to apologize publicly for many asperities which had characterised his previous attitude toward the great savant.

About this time the widened scientific view of Virchow, a view which had come to embrace the whole science of man, as comprehended in the then slumbering science of anthropology, began to be manifested in his contributions to literature. He was already accumulating facts which were to serve as the ground work of ethnology, yet, in spite of all this, acting in his capacity as a member of the Town Council, a position which he held for more than forty years, he was not oblivious to the fact that the sanitary condition of Berlin was deplorable. He, accordingly, became responsible for the establishmnt of those enormous hygienic reforms that have banished typhoid fever and other zymotic diseases from Berlin, and that have rendered that city one of the most salubrious in the world.

LATER WORK IN ARCHEOLOGY AND ETHNOLOGY.

Archeology, also, was at this time engaging his attention, and in the midst of the preparation of his valuable work on *The Topography of Troy*, he, in 1878, retired from active political life, only, however, to be elected two years later to the German Reichstag. In this body, however, he was always an interested spectator, rather than an active participant, and never aspired to the office of party leadership. It is not to be assumed, however, from this that Virchow's intellectual

activity was by any means at an end, or even upon the wane. The twenty years following his election to the Reichstag were among the most fruitful, intellectually, of his entire life. He amplified in many particulars his teachings of cellular pathology. He delved more deeply than ever into the hidden mysteries of ethnology, producing, in 1882, his valuable work on *Old Trojan Graves and Skulls*. At the very pinnacle of scientific fame he kept himself *au courant* with the whole trend of scientific thought, delivering an address before an International Congress at Berlin, at Paris, at Moscow or at Rome, laboring in an assemblage of scientists here, or in a hygienic congress there, or delivering a Croonian or a Huxley lecture in London. With his editorial labors always in hand, he still clung industriously to his old haunts in the Pathological Institute, in the Anthropological Museum, or in his ward at the Charité; for, be it remembered, Virchow was always a practical physician. It has been said of him that during these years he knew no such thing as a vacation, in the ordinary sense of the word, for it was his habit rather to find recreation in a change of occupation, such, for instance, as visiting Asia Minor, and, pick in hand, to assist his friend Schliemann in his wonderful archeologic researches.

THE HUMAN SIDE.

In the midst of it all he was very much of a man on the human side, a little wiry man, but a little over five feet in stature, sprightly, congenial, loving and lovable. His domestic life has been described as ideal. The many Americans who were present at the Berlin meeting of the International Medical Congress, will recall his active and whole-souled participation in the festivities of that occasion. He was given a Festschrift on his seventieth birthday, and again on his eightieth, on which later occasion, in particular, delegates were present from practically every country, and festivities were held simultaneously in practically every leading city of the world.

On January 3, 1902, he sustained a fracture of the neck of the femur by falling from a tram car. He died September 5, 1902, mourned by the civilised world. The municipality of Berlin, which he had faithfully and efficiently served as a councillor for so many years, accorded him the distinction of a public funeral, which, in the midst of universal mourning, was participated in by many officials from the political and scientific world.

GERMAN MEDICINE AT THE BEGINNING OF VIRCHOW'S CAREER.

This, then, was the man upon whose work we are called, at this hour, to pronounce a formal appreciation. It is rare, indeed, that the occasion arises to attempt, in even a desultory way, the estimation of a career that has resulted in the establishment of two distinct, although correlated sciences, and in the substantial advancement of human liberty. It would be quite out of the question in an address such as this, to attempt a résumé of his doctrines in pathology, a mere enumeration of his contributions to which would involve the employment of more than twice as many words as I shall employ in your hearing. We may, however, arrive at some estimate of his work in this great department by pausing, for a moment, to consider the state of medical science, or more particularly, the conceptions of disease that obtained in Germany when Virchow was made the successor of Froriep at Berlin. It is true that Rokitansky had introduced many of the revolutionising doctrines of Bichat at Vienna, but even Rokitansky was busying himself to an important extent in promulgating the purely dogmatic doctrine of crases.

Oken, at Munich, was indulging in the glittering generality that life is the self-generation of individualised elements, that the principle of life is galvanism, and that vital force is galvanic polarity. Of him Agassiz declared that he constructed the entire universe out of his brain. Dollinger, of Würzburg, the father of the great theologian, belonged to the same speculative school which a historian has designated as the "Romanticist or Teutomaniacs." At Berlin, Schönlein, who had been one of Virchow's teachers, and was yet his colleague, and who represented what was designated as the Natural History School, taught that disease was an entity, a sort of parasite, sojourning temporarily in the body, just as Paracelsus had once spoken of a "microcosm within a microcosm." Schönlein, more specifically, looked upon disease as a sort of equivocal infusoria, the existence of which he logically predicated, but never, of course, physically demonstrated. These infusoria, the existence of which was thus gratuitously assumed, were easily enough imagined to consist of genera and species, each producing different clinical phenomena—a sort of empirical prophecy of the germ theory which has since played so important a rôle in medical philosophy. It was against such theoretic doctrines, then dominant, that Virchow brought the evidence of the microscope

and the revelations of mortuary. He began in the truly scientific manner, which consists always, first in the observation of concrete facts, next in their classification, and third in their ultimate generalisation.

THE DOCTRINE OF VIRCHOW.

His labors at Würzburg, supplemented by those conducted under more favorable auspices, after his return to Berlin, enabled him to announce as the seminal doctrine of his philosophy,—and I employ the words he subsequently used at the fiftieth Congress of Naturalists and Physicians,—namely, that the new science was based "chiefly on the recognition of the fact that the cell is actually the ultimate, proper morphological element of every vital manifestation—*omnis cellula e cellula*—and that we must not remove the proper action beyond the cell." In the early elaboration of this doctrine, taking up the work where Schwann and Schleiden had left it, he early proclaimed the importance of the nucleus to the maintenance and multiplication of the cell, and emphasised the fact that tissue growth implies cell multiplication, while the contents of the cell, and even of the material deposited outside of it are of controlling importance to function. He taught, furthermore, and as a necessary corollary of the preceding postulates, that tissues vary in function according as they vary in cellular construction. He insisted upon the existence of an intercellular tubular system that supplemented the recognised circulatory systems in the work of ultimate nutrition.

As a result of his investigations of the circulatory apparatus and of the blood, he taught that the walls of the bloodvessels were impervious and argued that blood, or even the nutrient elements of the blood, could not escape from them without rupture of the wall, which rupture was, however, rarely, if ever, demonstrable. It would seem that in this doctrine, which I believe is as near an approach to empirical dogmaticism as could be found in all his teachings, Virchow laid a logical foundation for the new doctrine of osmosis, that today promises to take both physiology and pathology largely into the realm of physics. He directed his arguments specifically against the then prevailing humoral pathology by insisting that the blood itself is not the proper and original cause of dyscrasiæ, as taught even by Rokitansky, but that instead these dyscrasiæ have their origin rather in a disturbed metabolism, the toxic products

of which are merely carried in the blood. These laborious studies of many phases of blood changes, comprise the basis of our present accurate conception of the pathology of the circulatory medium. His study of inflammation, in the description of which he insisted that disturbed function should be added to heat, pain, redness and swelling, as one of the cardinal indiciæ of the phenomena, gave an accurate conception of the actual changes. His elaborate investigations of the nervous system resulted in the promulgation of doctrines whose parentage in the works of Brown and Haller is recognisable. His work on tumors, a distinct application of the cellular doctrine, stands today as the fundamental classic of the subject. His investigation of tuberculosis resulted first in his classification of the disease into neoplastic and inflammatory forms, but laterally he recognised the bacillary forms.

THE POSITION OF CELLULAR PATHOLOGY.

It would be impossible, however, as I have before stated, to give even an accurate résumé of this extensive philosophy, the application of which to the entire phenomena of disease must stand as his crowning achievement. It is interesting to hear him recount, as he did in a lecture delivered in London, during the last years of his life, the general summarisation of his work in the statement that "the law of continuity of animal development is, therefore, identical with the law of heredity, and this I was now able to apply to the whole field of pathological new formation." And it was especially interesting, in view of the ideas against which he had to contend, to hear him add with pardonable exultation: "I blocked forever the last loop-hole of the opponents, the doctrine of specific pathological cells from which types and ancestors were not forthcoming in normal life."

The doctrines which he had thus established, and to which he thus alluded, became, early in their history, the actuating principles of the "Berlin School," which, sooner or later, embraced the names of Leyden, von Rechlinghausen, Cohnheim, Waldeyer, Hoppe-Seyler, Kuhne, Rindfleisch, Klebbs, Liebrich, Frederic, in Germany; Felix Simon, in England; and, conspicuously W. H. Welch, in the United States. The principles taught by this school are, by common consent, those upon which modern surgery and rational therapy alike are based.

The position that must be accorded this doctrine in the light of further revelation of fundamental law, cannot be foretold.

Nothing could be further from the purpose of Virchow himself, than the assumption that his doctrine represented the finality of truth or that it made impossible further discoveries either based upon or antagonistic to it. Much has, indeed, been made possible since the date of his earlier revelations. This is notably true of the doctrine of the infectiousness of disease, which is based upon observations that were made possible only by a later perfection in optics and by a later advancement in the technique of biologic research. The most that can be said of the relation of the germ theory of disease to that of cellular pathology is, that without invalidating the important conclusions embraced in the latter, it left Virchow's recorded observations unimpaired and undisputed. The new doctrine of the ions, involving the principle of osmosis, may bring other and important supplementary facts which shall serve to show that the discoveries of Virchow comprised in the aggregate a single, but important link, in the evolving chain of science.

VIRCHOW AND THE FOUNDATION OF ETHNOLOGY.

The next phase of Virchow's character as a scientist relates to his work in the department of anthropology. This, the science of man in its broadest conception, can scarcely be said to have had more than a mere commencement before Virchow, beginning with his work in biology, was led into it by the widening circle of associated ideas. It may be said, indeed, no valuable contributions were made to the subject during the first half of the 19th century. Blumenbach, of Göttingen, had made his famous collection of skulls,—his "Golgotha" as he called it,—which was the basis of his own investigations, and which may be said to have been the starting point of systematic anthropological study. About the same time, that is the last years of the eighteenth and the first years of the nineteenth century, von Sömmering, of Frankfurt, studied the eyes, not only with reference to their anatomical detail, but with reference to their ethnic significance, while Camper, of Holland, made a careful study of the facial angles. This was practically all that was done with the subject, until Darwin issued his *Origin of Species*, in 1859; his *Descent of Man*, his first contribution to the subject of ethnology, did not appear until 1872. Long before the latter date, however, Virchow had taken up the subject at two points of contact. The first point of contact was developed out of his philosophy of cell genesis, the doctrine

that all cells are derived from preëxisting cells, which he promulgated in 1859, and which brought up, as a natural corollary, the question of variation of type. His antagonists,—the believers in special creations,—seized eagerly upon this declaration as a refutation of the then rapidly growing materialistic philosophy, and as a vindication of their own ontologic dogmas.

If the cell is the vital unit, as Virchow declares, and if the individual is but the sum of cells, they urged, then variation in the individual can occur only as the result and commensurately with the variation in the constituent cells; if, they added, like cells always beget like cells, as Virchow declares, then the individual, the sum of cells, cannot vary from his cellular type; and, finally, they insisted, if all the cells in the individual have been derived through the generations from cells of the same type, then the original cells, at the beginning of things, must have been the products of a special and miraculous creative act.

Unfortunately, however, for this specious logic, Virchow taught, in effect, that like cells begat like cells only, however, under like circumstances, and that, as the circumstances vary, so does the cell type vary. This is, indeed, the point of departure from the standard of health, the very beginning of pathological phenomena.

VIRCHOW AND DARWIN.

As a matter of fact, Virchow simply declined to discuss the origin of species until sufficient evidence to justify him in doing so could be derived from a careful search of the tissues. He recognised the mutability of the cells, and realising, logically, that variations in type must begin in these vital units, he, without denying the truthfulness, or affirming the falsity of Darwin's hypothesis, simply awaited the demonstration of the actual changes within the cell. It is an interesting fact, and one bearing testimony to Virchow's scientific acumen, that this very variation was reduced to a physical demonstration in 1900 by Professor Guyer, of the University of Cincinnati, whose investigations are recorded in his valuable contribution on "Hybridism and the germ-cell." It is also of striking interest, at this time, and one bearing testimony to the reliability of Virchow's deduction, not only that these observations of Guyer's, but that Mendel's law, promulgated through an obscure periodical at Brunn, Austria, in 1865, seemed to cover the entire point. This law of Mendel, or, as I believe we

should now call it, the Mendel-Guyer law, is in effect that, as a result of definite and demonstrable changes in the germ cell, the second and later generations of a hybrid possess every possible combination of apparent characters, and that each combination appears in a definite proportion of the individuals, the whole reduced to the terms of a definite equation. This law, revealed by observations in both the animal and vegetable world, seems to be one of general applicability, and one that is calculated to invest the conclusions of Virchow with an increased value.

The next point at which Virchow was brought in contact with the general problem of anthropology, or more particularly, that of ethnology, grew out of his studies of cretinism, and of the causes of variations in the growth of the skull. It was precisely this study of the pathologic phases of craniology that enabled him to detect morbid changes in the celebrated Neanderthal skull, which, with its protruding supraorbital ridges, its low forehead, and its small cranial capacity, even the scientific world was too disposed to accept as the normal index of a racial type that had long since passed away. Virchow further insisted that, even if it were normal, the existence of a single skull was not sufficient evidence upon which to predicate the existence of an entire race, and that conclusions should be withheld until further evidence was secured. It was this cautious utterance, thoroughly characteristic of Virchow, that gave the theologic polemics another opportunity falsely to proclaim that he was an antagonist of the doctrine of descent, as promulgated by Darwin. It seems that the utterance, seized upon for this particular misrepresentation, occurred in an address delivered in 1877, before the German Naturalists and Physicians, and was to the effect that the hypothesis of Darwin ought not hastily to be given the force of law,—that it ought not to be placed in the category of law,—without first waiting to gather and accumulate all relevant facts. It was just this scientific discrimination between hypothesis and law—a discrimination repeatedly expressed and emphasised by Darwin himself—and just this conservative tendency in the consideration of demonstrated facts, and in the formulation of conclusions based upon them, that gave to the judgment of Virchow the greatest possible weight in the scientific world. And it was this very weight which he, himself, as late as 1900, with true scientific spirit, was disposed to deprecate; for he had spent his life in dethroning

the power of personal influence, and in establishing the regnancy of demonstrated truth.

TENTATIVE CONCLUSION IN ETHNOLOGY.

His work in anthropology, however, considered from its positive side, was very great. He was always an organiser,—a valuable weakness in a man of brains,—and it was by this means that much of his work was brought to its full fruition. He organised, or at least assisted in the organisation of the German Anthropological Society and the *Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte;* he helped to found the *Museum für Volkstrachten;* and the almost invaluable *Archiv für Anthropologie.* He, with his colleagues, gave serious study to the physical characteristics of the early Germans. This was supplemented by statistical investigation of the present distribution of the color of skin, eyes and hair in Germany, the whole being reduced to cartographic representation. His descriptions of American crania, based upon Morton's great work, opened that mine of information to German thought. He was the friend and promoter of Schliemann, in whose archeological explanations he was at times a personal participant; he recorded the results of these labors in two books, *Contributions to the Topography of Troy*, and *Old Trojan Graves and Skulls*, each of which is recognised as a valuable contribution to the subject. Extensive, however, as were the researches, and important as were his recorded observations, it does not appear that he considered either of them sufficiently extensive to warrant him in arriving at important general conclusions. He felt justified, however, in saying, as he did say, that physical types do not vary with variations in language and culture, and that different types may blend in the formation of a homogeneous people. This lesson was taught him by a study of the racial types in Germany, and is of extreme interest to us in the United States, where, at this present moment, we are in the midst of the greatest ethnic experiment in the history of the human race. In viewing the entire scope of Virchow's labors in anthropology, it must be concluded that he did not carry them to the point of even relative finality, that he did his labors in pathology; his researches, his discoveries in ethnology must be recognised as fundamental, their true significance remaining to be interpreted in the light of rapidly accumulating evidence. It is sufficient, however, for the perpetuity of his

fame, that, by common consent, he is recognised as the veritable founder of this new science, which promises so much for the interpretation of the racial types of men.

THE FORCE OF THE MAN.

The third side of this great character was the human side, manifesting itself, not alone as a husband and father, but conspicuously as a citizen. He early showed that the prevalent opinion, that to be highly intelligent on one subject it is necessary to be correspondingly stupid on all other subjects, is but a vulgar notion, and he speedily demonstrated that the viewpoint of the physician is eminently calculated to afford an intelligent insight into social, economic and political conditions. I must however leave it to the political historian and to the public economist to tell what good has been accomplished in Germany in the last fifty years by the liberal movement, a movement that for many decades enjoyed the distinction of Virchow's leadership. A few things are certain: the hated Carlsbad Decrees could not be enforced in Germany today; there is a greater freedom of thought and, what is more important, of expression in German universities than ever before; the offense of *lèse majesté*, strange sounding to republican ears, has a less severe meaning in Germany than it had fifty years ago, and it is equally certain that, for the first time in history, the entire *Vaterland* has a reasonably liberal constitution, wrested from the tyranny of absolutism,—a condition that leads to the hope that the German people may some time enjoy the same beneficent government that today blesses the Great Republic. In the achievement of these results it cannot be denied that Virchow played a leading and an honored part.

THE FINAL VIEW.

What, then, are we to say in final review of this great man? His figure is that of a colossus, and it will require the perspective afforded by receding years to measure its relative height. Some things, however, we can now tell. He inherited honest blood; he responded in the fullest and in the best sense to the formative influences with which his early life was surrounded; he had the independence to defy personal dictum, and to give allegiance only to demonstrated truth. He had the intelligence to discern and the human sympathy to appreciate that human happiness depended first and chiefly upon a knowledge of the

laws underlying and governing human existence; he worked on independent lines and revealed laws of disease previously hidden; he, by his observations and deductions, and by the elaboration of rational methods, laid the foundation of modern medicine; he established the study of racial man as a science; he fought the battle for human liberty, and won for others the boon that he had always arrogated to himself. He added years to the generation of man, and brought happiness to his kind. Finally, let it be recorded, that, above all, he lived faithful to his ideals, —and the greatest of these was Truth.

CLINICAL REPORT.

Acetozone in Gastrointestinal Disease.

By W. F. DRAKE, M. D., New York.

CASE I.—A. B., 56 years of age, was brought to me suffering from gastrointestinal catarrh and chronic colitis, which had lasted for six years. For a long time he had been treated with high enemas of salol, resorcin, and the like, but without benefit. Finally, I determined to try acetozone, of which I gave him a quantity of the 1-1000 solution after meals, with instructions that the colon should be irrigated daily with normal salt solution. Under this treatment a marked improvement was manifested in a few days; the flatulency disappeared and the patient suffered absolutely no pain. Prior to the exhibition of acetozone his heart's action was very irregular, but it now became perfectly normal. The acetozone treatment was continued for about six months when the patient was discharged. He still continues to use enemas of salt solution, once a week, and takes a dose of cascara evacuant as a laxative, occasionally. None of the former distressing symptoms have returned.

Case II.—C. D., 34 years of age, after suffering from acute catarrhal appendicitis, for which the usual treatment of ice bags and high enemas had been employed, made a fairly good recovery. He afterward suffered from intestinal fermentation, accompanied by flatulency, tenderness in the region of the appendix, very irregular heart's action, mitral regurgitation, severe sick headache, foul breath, and a heavily coated tongue. I prescribed 30 drops of cascara evacuant each evening as a laxative, and the acetozone solution after meals. After three months of this treatment the patient was discharged cured.

SOCIETY PROCEEDINGS.

Medical Society of the County of Erie.

Memorial Meeting.

Herman Mynter, M. D.

Reported by FRANKLIN C. GRAM, M. D., Secretary.

THE Medical Society of the County of Erie met in special session February 11, 1903, in the parlors of the Y. M. C. A., Buffalo, in response to a call by President Ernest Wende, who stated that he had requested the presence of the members for the purpose of taking appropriate action on the death of Dr. Herman Mynter, an honored member of this society.

Dr. Henry Reed Hopkins moved that the president appoint a committee of five to submit a suitable memorial. The resolution was adopted and the president appointed Drs. H. R. Hopkins, Charles G. Stockton, Joseph Fowler, Eugene A. Smith and James W. Putnam.

The committee presented the following, which was adopted:

Forasmuch as it hath pleased Almighty God, in His wise providence, to take out of the world the soul of our deceased brother, Dr. Herman Mynter, we, the Medical Society of the County of Erie, therefore declare and pronounce this estimate and testimonial of his life, work and character.

Herman Mynter was generously endowed by an honorable ancestry, with rare gifts of mind and person. These gifts, fortunately, had been well developed by his educational training, the best the schools and universities of Europe could give; and when in the days of his early manhood he came to Buffalo to become a loyal and enthusiastic American citizen, and a member of its medical profession, he came not empty handed, but magnificently equipped; not needing care, but ready and able to care for others. During his entire life, as strength and health permitted, he practised his profession, which he ever honored and adorned, with devotion to its highest ideals, and with distinguished success.

Dr. Mynter was a frequent contributor to the literature of medicine, and his contributions ever bore the mark of distinct individuality, unusual mastery of its scientific principles and progress-making originality. His success as a teacher was pronounced, because he ever gave to this portion of his work—as

to all his efforts,—his very best. The monument of his life, more lasting and beautiful than carven granite, or sculptured marble, is his practice—where thousands of human lives have been blest by his intelligent conception of scientific principles and his skilful application of these principles for the relief of suffering, deformity and disease.

We loved him and we will cherish his memory, not only for his brilliant professional achievements of mind and hand, but moreover for his record of clean, manly and blameless walk and conversation, the proof of the intrinsic nobility of his character. Therefore

Resolved, That this minute be accepted, inscribed upon our records, and a copy transmitted to the family of our deceased brother.

HENRY R. HOPKINS,
CHARLES G. STOCKTON,
JOSEPH FOWLER,
JAMES W. PUTNAM,
EUGENE A. SMITH.

DR. EUGENE A. SMITH said he had been closely associated with Dr. Mynter for ten years, as his assistant in the Sisters of Charity Hospital, the Niagara Medical College and in his private practice. He spoke of his professional and other characteristics, his phenomenal success as a surgeon, his ability as a teacher of surgery, as a clinician, and his diagnostic intuition.

DR. JAMES W. PUTNAM appreciated his ability. He was a leader wherever he went, and the honesty of his convictions was always apparent. Among members of his own profession he was always frank, and acknowledged no man as his superior. He achieved fame and established himself as a careful and thorough surgeon during the first year of his practice in Buffalo. In spite of adversity, which would have subdued a weaker man, he held his place in the surgical ranks to the end.

DR. IRVING M. SNOW spoke of Dr. Mynter's ancestors, who were famous in the history of their country.

DR. JAMES S. SMITH had known Dr. Mynter since he came to Buffalo, and believed himself better for such acquaintance. He mentioned some of Dr. Mynter's first operations for appendicitis, on which he later became an authority. He was a great student as well as a great surgeon.

DR. EUGENE WASDIN, of the United States Marine Hospital Service, added a personal tribute, in which he mentioned his association with Dr. Mynter in the culminating case of his life,

during the trying time following the assassination of President McKinley.

Dr. Charles G. Stockton joined with other members in the expression of grief. Dr. Mynter occupied a unique place in the community. He combined a childlike simplicity with manly strength. He put great force and intensity of feeling into every question, but at the end of every controversy Mynter was himself again and never bore a grudge.

Dr. J. B. Coakley likewise emphasised the simplicity of Dr. Mynter's life and related some personal incidents.

Dr. P. W. Van Peyma dwelt upon his honesty, brusqueness, frankness and generosity, which were always in evidence.

At the conclusion of these remarks the society adjourned.

Buffalo Academy of Medicine.

Section on Medicine, January 13, 1903.

Reported by N. L. BURNHAM, M. D., Secretary.

The Medical Section of the Buffalo Academy of Medicine held its regular meeting in the Academy Rooms, Public Library Building, Tuesday evening, March 10, 1903, Dr. A. E. Woehnert in the chair.

Dr. A. L. Benedict presented a paper on

LOCAL GEOGRAPHIC CONDITIONS AND POPULATION AS BEARING ON THE WATER SUPPLY AND SEWERAGE OF BUFFALO.[1]

DISCUSSION.

Dr. Walter D. Greene, Health Commissioner of Buffalo, in opening the discussion, said that the water supply of Buffalo is not as good as it was ten years ago. There was very appreciable pollution of Buffalo's water supply during 1901—the Pan-American year. The amount of chlorine has increased from 3 parts to between $8\frac{1}{2}$ and 11 parts per 1,000,000 during the past ten years. During the same period the albuminoid ammonia has increased to three times the amount it was. He recommended a filtration plant.

Dr. Charles Cary asked Dr. Greene whether cases of typhoid fever, which develop in West Seneca and are removed to the Buffalo Hospitals, are counted as city cases? Also what

1. To be published.

is the ordinary impurity of water where no sewage is poured in? Could Smokes Creek be turned inside the breakwater?

Dr. Greene replied that the ordinary impurity of water, as nearly as he could state, was chlorine 3 per 1,000,000; albuminoid ammonia, .03 to .04 per 1,000,000. There is a canal which runs from inside the breakwater nearly to Smokes Creek, and an effort had been made to get the right to extend this canal to the creek, but as yet the steel plant authorities had not granted the request. We have twice as many cases of typhoid fever now as we had a year ago. Cases coming from Stony Point and reported from the hospitals or private residences are counted as city cases.

Dr. Henry R. Hopkins said that during the past twenty years we have had from eight to twenty times as much typhoid as any intelligent community should have. Bird Island pier is no screen for sewage. Lake Erie is becoming constantly more contaminated and we must have a filtration plant.

Dr. Chas. R. Borzilleri considered the West Seneca soil in the vicinity of the Steel Plant to be seriously contaminated with the typhoid bacillus.

Dr. George E. Fell said the Canadian channel current brings water to our intake. This is a tremendously heavy current and he did not believe Smokes Creek water ever reaches our source of water supply.

Dr. Bernard Bartow had spent the last ten summers along the American shore near Eighteen Mile Creek. There is a current of half a mile an hour toward Buffalo on a calm day. With a breeze in the same direction the current is changed to a mile an hour, while with a heavy breeze the current is increased to two miles an hour. With the present construction of the sea wall this current carries Smokes Creek water to our source of water supply.

Dr. E. H. Ballou, health officer at West Seneca, stated that during the past six months one physician had reported 100 cases of typhoid fever occurring in that town. At the present time there is being carried on a thorough house to house inspection. There soon will be a population of 50,000 people upon four square miles of land, all of which is to be sewered into Smokes Creek.

Dr. B. G. Long pointed out that the children should be supplied with boiled water at school.

Health Commissioner Greene said that the subject of boiled water in the schools was an important one, and that today Superintendent Emerson and himself had visited some of the schools endeavoring to solve this problem.

ABSTRACT.

Collargolum in the Treatment of Infectious Diseases.

PROFESSOR NETTER, of Paris (*Bulletins et Mémoires de la Société Médicale des Hopitaux de Paris*, No. 37, December 18, 1902), details at length eleven cases treated with endovenous injections of collargolum and inunctions of unguentum Credé, with excellent results, all of them recovering rapidly. They consisted of one acute pericarditis, one pneumonia with purulent effusion; one cerebrospinal meningitis; a grave complicated scarlatina; two severe diphtherias; an acute ulcerative tuberculosis; three cases of typhoid; and one pyemia.

The favorable action of collargolum is first evidenced by the fall in temperature, which occurs either suddenly or gradually. This is particularly prompt when the medication is administered early. At the same time occurs a remarkable improvement of the general condition of the patient, the quick return of strength and appetite recalling the phenomena so often noticed after the injection of antitoxin.

The local changes are sometimes equally rapid. By the next day phlegmons and gland irritations have lost their inflammatory character, and swellings are often so diminished that only traces of them remain. Ganglionic enlargements promptly resolve; pleuritic suppurations are absorbed; pericarditis and pneumonia are favorably influenced; and even valvular lesions disappear.

Based on his observations, Netter recommends collargolum in pyemia, septicemia, in all the various forms of puerperal infection, in infectious endocarditis, cerebrospinal meningitis, scarlatina, mixed diphtheria, grave typhoid fever, in certain tuberculoses of the pneumonic form, in pneumonia, and in rheumatism with a tendency to visceral complications. In most cases inunctions of the Credé ointment suffice for the introduction of the medicament into the system. But when an immediate and vigorous action is urgently needed, recourse to intravenous injections should be taken.

CORRESPONDENCE.

The Prophylaxis of Venereal Diseases.

Editor Buffalo Medical Journal :

Sir—At the last (fifty-third) meeting of the American Medical Association, held at Saratoga Springs, June 10-13, 1902, a joint resolution was passed by the sections of Cutaneous Medicine and Surgery and Hygiene and Sanitary Science, to be introduced in the House of Delegates, as follows:

Whereas, There is a burning necessity to check the spread of venereal diseases, and, assuming that the states cannot with impunity ignore the condition, it lies in the province of the medical profession to discuss and recommend to the respective state legislatures and municipalities means not regulative, but social, economic, educative and sanitary in their character, to diminish the danger from venereal diseases.

Resolved, That the section on Cutaneous Medicine and Surgery of the American Medical Association invites the section on Hygiene and Sanitary Science to coöperate with the section on Cutaneous Medicine and Surgery in bringing about a propaganda in the different states, looking toward a proper recognition of the dangers from venereal diseases, and to arrange for a national meeting under the auspices of the American Medical Association for the prophylaxis of venereal diseases, similar to the International Conference for the Prophylaxis of Venereal Diseases, which meets again this year at Brussels, under the authority of the Belgian Government.

This was later submitted to the House of Delegates, which endorsed the action of the section and adopted the following:

Resolved, That a joint committee of six from the Sections on Hygiene and Sanitary Science and Cutaneous Medicine and Surgery be appointed by the president to stimulate study in and uniform knowledge of the subject of the prophylaxis of venereal diseases, and to present to the American Medical Association a plan for a national meeting, similar to the International Conference for the Prophylaxis of Venereal Diseases, which meets again this year in Brussels, under the auspices of the government of Belgium.

The Committee on Prophylaxis of Venereal Diseases consists of: Henry D. Holton, Chairman, Brattleboro, Vt.; Ludwig Weiss, Secretary, 77 East 91st Street, New York; George M. Kober, 1600 T Street, Washington, D. C.; W. H. Sanders, Montgomery, Ala.; L. Duncan Bulkley, 531 Madison Avenue,

New York; Frank H. Montgomery, 100 State Street, Chicago, Ill.

The peculiar social, racial and political conditions of our country are so different from those on the continent, that they necessitate an expression of solely American ideas on this mooted question, both from a socio-economic and sanitary point of view.

The committee desires the support of the medical profession and the aid and powerful collaboration of the medical press of the country to help them in this work. It takes the liberty of soliciting expressions and views editorially and otherwise, and would be glad of personal correspondence from those supporting the movement and who will contribute by papers and the like to make it a success in case the House of Delegates should favor the holding of such a congress.

By giving this a place in your esteemed paper, the committee feel that you will have aided materially in forwarding the work entrusted to them.

LUDWIG WEISS, M. D.,
Secretary of Committee.

New York, March 4, 1903.

The Dangers of Alcohol.

Editor Buffalo Medical Journal:

Sir—Three times during the last half century medical manifestos have been issued, giving the opinion of physicians on alcohol. The first was issued in 1839, and was signed by 86 persons. The second in 1847, and was signed by 2,000 physicians, and the third appeared in 1871, with the signatures of over 4,000 physicians, including the names of many leading physicians in all parts of the world. A fourth declaration of opinions is now being circulated for signatures, and reads as follows:

The following statement has been agreed upon by the Council of the British Medical Temperance Association, the American Medical Temperance Association, the Society of Medical Abstainers in Germany, and leading physicians in England and on the continent. The purpose of this is to have a general agreement of opinions of all prominent physicians in civilised countries concerning the dangers from alcohol, and in

this way give support to the efforts made to check and prevent the evils from this source.

DECLARATION.

In view of the terrible evils which have resulted from the consumption of alcohol, evils which in many parts of the world are rapidly increasing, we, members of the medical profession, feel it to be our duty, as being in some sense the guardians of the public health, to speak plainly of the nature of alcohol, and of the injury to the individual and the dangers to the community which arise from the prevalent use of intoxicating liquors as beverages. We think it ought to be known by all that:

1. Experiments have demonstrated that even a small quantity of alcoholic liquor, either immediately or after a short time, prevents perfect mental action, and interferes with the function of the cells and tissues of the body, impairing self-control by producing progressive paralysis of the judgment and of the will, and having other markedly injurious effects. Hence alcohol must be regarded as a poison, and ought not to be classed among foods.

2. Observation establishes the fact that a moderate use of alcoholic liquors, continued over a number of years, produces a gradual deterioration of the tissues of the body, and hastens the changes which old age brings, thus increasing the average liability to disease (especially to infectious disease), and shortening the duration of life.

3. Total abstainers, other conditions being similar, can perform more work, possess greater powers of endurance, have on the average less sickness, and recover more quickly than non-abstainers, especially from infectious diseases, while they altogether escape diseases specially caused by alcohol.

4. All the bodily functions of a man, as of every other animal, are best performed in the absence of alcohol, and any supposed experience to the contrary is founded on delusion, a result of the action of alcohol on the nerve centers.

5. Further, alcohol tends to produce in the offspring of drinkers an unstable nervous system, lowering them mentally, morally and physically. Thus deterioration of the race threatens us, and this is likely to be greatly accelerated by the alarming increase of drinking among women, who have hitherto been little addicted to this vice. Since the mothers of the coming generation are thus involved, the importance and danger of this increase cannot be exaggerated.

Seeing, then, that the common use of alcoholic beverages is always and everywhere followed, sooner or later, by moral, physical and social results of a most serious and threatening character, and that it is the cause, direct or indirect, of a very large proportion of the poverty, suffering, vice, crime, lunacy,

disease, and death, not only in the case of those who take such beverages, but in the case of others who are unavoidably associated with them, we feel warranted, nay, compelled to urge the general adoption of total abstinence from all intoxicating liquors as beverages as the surest, simplest and quickest method of removing the evils which necessarily result from their use. Such a course is not only universally safe, but is also natural.

We believe that such an era of health, happiness and prosperity would be inaugurated thereby that many of the social problems of the present age would be solved.

This declaration has already received the signatures of over 1,000 physicians in all parts of the country. I have been appointed chairman to present this manifesto to American physicians for their endorsement. I should be very glad to receive the name, title and address of any physician who is willing to aid by his signature in the correction of public sentiment and assist in the prevention of one of the great evils of the age. This is purely a scientific effort for the purpose of having a general consensus of opinion of the leading physicians of the world, and it is assumed that American physicians are equally enthusiastic and prompt to lend their signatures to this statement as in the wine-drinking countries of Europe. A postal card with address and title is earnestly solicited from every medical man who would like to be represented in this great movement for a clearer comprehension of the subject. Address

T. D. CROTHERS, M. D.,

March 10, 1903. Hartford, Conn.

RESULTS OF CREDÉ'S PROPHYLACTIC TREATMENT OF OPHTHALMIA NEONATORUM.

RUNGE (*Berliner Klin. Wochenschrift*, May 19, 1902,) has collected statistics on the results of instilling a 2 per cent. solution of argentic nitrate in the eyes of the newborn, as a prophylaxis against ophthalmia neonatorum. In a series of 1,917 cases, not a single case of early infection was observed, and only three babies developed a late infection near the end of the second week. About 20 per cent. of the mothers were affected with gonorrhea at the time of delivery. The essential factor in the treatment consists of instilling the solution as soon as possible after the birth of the child. In these cases the 2 per cent. solution never caused any marked irritation of the eyes, but such appearances have been described by other writers, who now employ a weaker solution and obtain equally satisfactory results. In a series of 600 cases treated with a 1 per cent. solution, there was not a single early infection, and only one case of late infection.—*Therapeutic Gazette.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XLII.—LVIII. APRIL, 1903. No. 9.

The State Educational Systems.

THE friction between the two heads of the educational departments of the state has been so long the subject of discussion in educational circles, in the newspapers, and among the people, that it ought by this time to be pretty well understood. It is difficult to comprehend why the department of public instruction was ever created; why the common schools were committed to the charge of a superintendent whose tenure is political; why the administration of the common schools was separated from that of the higher educational institutions. This, we say, is difficult to understand when the University of the State of New York, in existence since 1784, has stood ready to administer the entire educational system in a faithful, non-partisan, economic, and thoroughgoing manner.

Whatever reasons may have been considered adequate for establishing the department of public instruction have now ceased to be cogent for its continuance, in view of the fact that it seeks to control matters clearly within the province of the regents, and that it even sets itself over and above that body in many respects. It is quite time that this misfit between these two systems which has well-nigh become a scandal, should be corrected, that the intolerable situation now existing should be brought to an end. It should be done, too, in a permanent fashion in order that it may not be possible to witness its renewal.

Several methods of accomplishing this result have been proposed, but of all that of Senator Stevens, of Attica, representing the 46th senatorial district, appears the most feasible and efficient. The text of the bill is as follows:

The offices of state superintendent of public instruction and of the deputies of such superintendent are hereby abolished, and the powers, functions and duties of such offices are hereby continued and vested in the University of the State of New York and shall hereafter be exercised and performed by its regents, or, as they shall direct, by their officers and appointees and the persons, other than such deputies, now in office as appointees of the present superintendent; and his said appointees shall, subject to the direction and during the pleasure of the said regents, continue in their present positions and receive their present compensation. The present state superintendent of public instruction and his deputies shall be entitled to receive their present salaries until the expiration of the term for which the said superintendent was elected, but they shall hereafter have, exercise and perform only such powers and duties as the said regents shall expressly direct.

The superintendent is elected by the legislature for three years; the regents are appointed for life; the former is a political officer; the board of regents is a constitutional body, non-political in character. If the foregoing bill is enacted into law the educational interests of the state will be removed from the political arena,—a much to be desired consummation and one which every true friend of education will approve.

The medical profession takes great interest in the cause of education, and especially in the university and its administration as it exercises control over professional education in the state, and we may add with entire truthfulness, to the entire satisfaction of the colleges, profession, and people in general. The Medical Society of the County of Erie held a special meeting, March 18, 1903, at which the following preamble and resolution were unanimously adopted:

WHEREAS, The Medical Society of the County of Erie, State of New York, has called this meeting of members of the medical profession of the City of Buffalo and County of Erie; and

WHEREAS, As physicians and representatives of our several societies, we are unreservedly and unequivocally committed to the right of individual opinion and also to the paramount necessity for unity in action; and

WHEREAS, We have for years noted with regret the lack of unity in the educational system of our state; and,

WHEREAS, Legislation is now under consideration for the purpose of bringing about a much needed unification; and

WHEREAS, We believe that education is the foundation of the protection and promotion of the public health, the safeguard of civil and religious liberty, the bulwark of civilisation, and

that in education only the most intelligent methods should prevail, also that in education there should be unity of direction; and

WHEREAS, The University of the State of New York was conceived in the highest wisdom and for more than a century has been conducted with marvelous ability and success, and now holds the universal confidence of the educators and the educated; and

WHEREAS, It is the purpose of a bill now before the legislature at Albany, known as the Stevens bill, to provide for such unification of the educational system of the state under the direction of the regents of the university; therefore,

Resolved, That the medical profession of the City of Buffalo and County of Erie, hereby declares itself heartily in favor of the Stevens bill; that we urge our representatives to use all honorable efforts to secure its passage; that a copy of this declaration be sent to each member of our delegation and a copy to the Honorable James Russell Parsons, Jr., secretary of the university, regents' office, Albany, N.Y.

The foregoing is so expressive of the general feeling of the medical profession which is united on this important question, that we need not further extend the discussion in this place; but it is pertinent to urge every physician to exert his individual influence in favor of Senator Stevens's bill.

The American Medical Association at New Orleans.

THREE times since its establishment the national medical body has appointed its meetings at New Orleans, once in 1869, again in 1885, and now for May 5-8, 1903. It was not our privilege to attend the first time, but we had the good fortune to be present on the second occasion, hence, we can predict with the knowledge gained by experience that the approaching meeting will be one of the most enjoyable in the history of the association.

New Orleans, famous for its hospitalities, is at its best in May, when its verdure is fresh, when the fragrance of magnolias fills every air, and the hearts of its citizens, in the effulgence of the springtime, beat a responsive welcome to every coming guest. The city has grown since the last visit of the association and, great as were its attentions then, its reception to the profession of medicine in May will be proffered on a much wider scale.

The physicians of New Orleans are accustomed to extend generous greetings to their guests, and under the chairmanship of Dr. Isadore Dyer, an experienced and accomplished executive, something entirely beyond the ordinary may be expected, for, indeed, as given out, the plans indicate a wider-embracing scope than ever laid out on any previous occasion. The attendance bids fair to be the largest ever registered at any gathering of medical men in this country.

Once having settled in the affirmative the question of going, it becomes next of great importance to arrange details of the journey and the place of living in the Crescent City. For those residing in or near Buffalo the Illinois Central Railroad offers the most direct, attractive, and economic route of travel. The first stage of the journey will be either via Cincinnati or Chicago, the next to Memphis, and, finally, to New Orleans, the time occupied being about 48 hours. The fare for the round trip is $29, or $30.50, according to the route traveled from Buffalo to Cincinnati. This, however, can be arranged best by a visit to the office of Mr. G. B. Wyllie, at No. 210 Ellicott Square, the local representative of the road, who will gladly furnish any information whether tickets are purchased or not.

Hotel or other accommodations may be secured by addressing Dr. Isadore Dyer, chairman of the committee of arrangements, 124 Baronne Street, New Orleans, who will turn such requests over to the proper subcommittee for attention and answer. It is advisable that such applications be filed early in order to obtain desirable quarters.

The Boston Medical and Surgical Journal's Seventy-Fifth Anniversary.

IN A modest editorial in its issue of February 19, 1903, our sterling and esteemed contemporary commemorates its seventy-fifth year! It merely announces the fact in a few plain words, that its first number appeared February 19, 1828, and that there has been a continuous weekly issue of the *Journal* since that time. It mentions the further fact that in another form its birth antedates 1828, because it was the product of the consolidation of the *New England Medical Journal*, begun in 1812, and the *Boston Medical Intelligencer*, established in 1823, and adds that the *Boston Medical Journal* was not only the first,

but for many years the only weekly medical journal in this country. Reference then is made to some journalistic history, to an article by Dr. Billings on the Medical Journals of the United States, published in 1878, and to the impersonal editorial and business management of the *Journal*. And that is all!

The prolonged and honorable career of our Boston contemporary is the pride of every American medical editor, and it gives us great pleasure to offer our congratulations to the "dean" of medical journals, not only for the age it has attained, but for the course it has pursued during all its years,—a course at once honorable, conservative, progressive, scientific and distinguished. It is a record that may well stimulate the pride of all concerned in editing and publishing the *Journal*, and we cannot do more than to wish it continued prosperity on the lines it has marked out for itself. To every one connected with the conduct of the *Journal* we beg to say—"May you all live long and prosper."

A LITERATURE class for nurses has been instituted by Dr. Edwin Walker, of Evansville, Ind., at his sanitorium and training school. It has been in successful operation for some time and has attracted the attention of physicians and nurses far and wide. In the *Trained Nurse and Hospital Review*, Miss Rosalie Isabel Stewart presents the scheme in an interesting manner. It was she who, in association with a high school professor of literature, laid out a three-year course of study in literature for Dr. Walker's nurses. It is a most beneficial, instructive, and even amusing way in which nurses can be entertained when off duty, and deserves the attention of officers of training schools.

SEVERAL newspapers in this city have of late flaunted in the faces of the people advertisements so offensive in character that the grand jury of the county court lately felt constrained to administer the following censure:

The grand jury of the county of Erie for February, 1903, believing that the newspapers of Buffalo are and ought to be powerful factors in the improvement of existing conditions in matters affecting our moral and municipal life, therefore, this grand jury in performance of its public duty, does hereby express its emphatic disapproval of the course of some of our reputable newspapers, in allowing the use of their columns for advertising transparent fakes and frauds for deceiving the pub-

lic. The grand jury believes that in so doing these newspapers are lending their aid to schemes for fleecing the credulous and unwary instead of protecting the interests of the public by exposing such frauds or by refusing to publish such advertisements.

CHARLES N. BRAYTON, Foreman.
GEORGE R. HOWARD, Secretary.

Possibly, in case this admonition is inadequate to check the evil, another grand jury may take a step further in the premises.

THE New York Central & Hudson River Railroad, it is announced, will employ sixty surgeons along its route, between New York and Buffalo, to be called upon in case of the injury of passengers or employees. These surgeons are located at conveniently accessible distances. In case of accident the medical officer having charge of the section of road on which it occurs is to be notified at once and brought to the scene with all speed to render prompt aid to the injured.

These physicians will also be called by telegraph in cases of persons taken ill on trains and will minister to the physical ills of employees of the company. Specialists have also been employed to render service in cases in which their skill may be needful to cure the results of injuries or where a difficult operation may be necessary.

AFTER hearing General Leonard Wood, who delivered an after-luncheon address to the Liberal Club, March 7, 1903, it would not be easy to deny the thoroughness with which the sanitary work has been done in Cuba. Let us hear no more scepticism regarding the prophylaxis of vaccination when General Wood tells us that a regiment of about 800 men was vaccinated and revaccinated and then was detailed to care for 3,000 smallpox patients, but not one soldier caught the disease! During the last year of the occupancy the American army lost but fourteen men, eight of whom were drowned or otherwise accidentally killed. So much for intelligent sanitation in a country where there had been three hundred years of neglect.

IT IS reported that a child three years old died recently from eating pills, left by a distributor of samples on the steps of a residence on Grant Street in this city. Another child two years older, it is reported, was made ill from the same cause. Is it

not possible to put a stop to the annoying and, as shown by the circumstances, dangerous practice of house-to-house distribution of samples?

The secretary of the board of medical examiners, representing the Medical Society of the State of New York, reports as follows regarding the January, 1903, state medical licensing examinations: total number of candidates, 103; successful, 75 or 72 8-10 per cent.; unsuccessful, 28 or 27 1-10 per cent. Of this number 8 had previously passed in the medical primary branches. There was but 1 "honor" licentiate. Fifty-one candidates appeared for certificate of proficiency in the medical primary branches (anatomy, physiology, hygiene and chemistry). 47 or 92 1-10 per cent. of these were successful.

PERSONAL.

Dr. Wendell C. Phillips, of New York, has removed from 350 Madison Avenue to 40 West 47th Street. Hours: 10-1.

Dr. John H. Daniels, of Buffalo, has removed from 434 Ashland Avenue to 559 West Ferry Street. Hours: morning until 9; afternoon, 1 to 3; evening, 7 to 8. Both telephones.

Professor G. N. Calkins, who fills the chair of zoology at Columbia University, New York, lectured at the Buffalo University Medical College, Tuesday, March 17, 1903, at 5 p.m. His subject was Metabolism of the cell and protoplasma of old age. It was a highly entertaining and instructive delineation of a series of studies the lecturer has been conducting.

Dr. Herbert Mickle has removed from Buffalo to Cleveland, O. Dr. Mickle leaves many friends in this city who will regret the change he has felt constrained to make.

Dr. Burt C. Johnson, of Buffalo, sailed for Europe March 21, 1903, to spend a few months in study at educational centers in the old world.

Dr. Harry Mead, of Buffalo, has gone abroad for study in the capitals of Europe. He sailed March 21, 1903, on the Hamburg-American liner "Blucher."

Dr. George Ryerson Fowler, of Brooklyn, surgeon with the rank of colonel, who has lately served on the staff of Major-General Roe, has been made a brigadier-general by brevet in recognition of meritorious service in the National Guard for more than twenty-five years.

Dr. John McGaw Woodbury, the commissioner of street cleaning in New York, has been appointed surgeon of the 22d Infantry, N. Y., N. G., vice Surgeon Bennett S. Beach, retired. Dr. Woodbury has proved the most efficient executive of the department of street cleaning that New York has ever had, not excepting Col. Waring. The past winter has witnessed an unusual number of snow blockades in New York, but Dr. Woodbury has cleared the streets with surprising promptitude and marvelous skill.

Dr. Walter D. Greene, health commissioner of Buffalo, has been appointed a state medical inspector, to serve as representative of the state department of health during the prevalence of typhoid fever at West Seneca.

Dr. Edward Clark, deputy commissioner of health of Buffalo, has received an appointment similar to that of Dr. Greene, as stated above, and for like reasons and purposes.

Dr. E. H. Ballou, health officer of West Seneca, has been giving close attention to the typhoid fever epidemic at West Seneca and states that he regards it now under control. He has had the coöperation of Drs. Greene and Clark, as representatives of the state department of health. It has been a large undertaking in view of the pollution of Smokes Creek and great credit is due Dr. Ballou for the efficient service he has rendered.

Dr. Richard H. Satterlee, of Buffalo, recently entertained the Gross Medical Club in his apartments at The Touraine. The club membership comprises physicians residing in and near Buffalo, most of whom were present with their wives on this occasion, the ladies being entertained by Mrs. Satterlee. Dr. J. D. MacPherson, of Akron, read a paper entitled, Popular medical education; its influence in limiting the spread of disease, which will be published in a future number of the Journal.

Dr. Chauncey Pelton Smith, of Buffalo, has been appointed surgeon of the Buffalo, Rochester, and Pittsburg railroad.

Dr. L. J. McAdam, of Buffalo, has removed from 315 Jersey Street to 441 Dearborn Street.

OBITUARY.

Dr. T. Gaillard Thomas, of New York, died suddenly of cardiac disease at Thomasville, Ga., February 28, 1903, aged 71 years. He was born on Edisto Island, S.C., near Charleston, and was graduated in medicine from Charleston Medical College in 1852. Afterward he went abroad to further pursue medical study, and then located in New York, where he practised his profession until within a short time of his death.

Dr. Thomas first cultivated the field of obstetrics and became professor of obstetrics, gynecology, and diseases of children at the College of Physicians and Surgeons. His fame as a teacher and practitioner became world-wide, and he soon limited his work to gynecology and abdominal surgery. He achieved distinction as a successor of Marion Sims at the Woman's Hospital, where as operator and teacher he divided the honors with Thomas Addis Emmet for many years.

Dr. Thomas was a writer of great force and clearness, and became known all over the world through his treatise on diseases of women, which has been translated into many tongues. The last edition was issued with the collaboration of the late Dr. Paul F. Mundé, the latter doing most of the work in revising the book. Dr. Thomas was one of the founders and became president of the American Gynecological Society.

Dr. John Miller, of Buffalo, died at his residence, 48 St. John's Place, March 19, 1903, aged 79 years. He came to this country from Germany over fifty years ago and had practised medicine in western New York during that time, for the last twenty years in this city. He leaves a widow, three sons, and two daughters. His sons all are physicians,—Drs. John G. and Henry Miller residing at Lancaster and Dr. A. F. Miller, at Batavia.

Mrs. Sarah A. Gay, of Buffalo, widow of Dr. Charles C. F. Gay, died at the family home, February 23, 1903, aged 73 years. Mrs. Gay was the daughter of the late George W. Tifft, and was prominent in social circles for many years.

Mrs. Mary C. Miner, widow of Dr. Julius F. Miner, died at her home in Buffalo, February 23, 1903, aged 77 years. The death of Mrs. Miner removes one of the last remaining personages of the earlier period of Buffalo University memory, in which, as the consort of Professor Miner, she played an important part. She was held in great esteem by the older alumni, who mourn her loss and revere her memory.

Hon. Martin I. Townsend, of Troy, died at his home March 9, 1903, aged 93 years. He had been in public life for 70 years. He was the senior regent of the University of the State of New York, having served since 1873. He was one of the most successful lawyers of his time, and a man of distinguished ability.

SOCIETY MEETINGS.

The National Association of U. S. Pension Examining Surgeons will hold its next annual meeting at Washington, D.C., under the presidency of Dr. William A. Howe, of Phelps, N. Y. The secretary, Dr. Wheelock Rider, of Rochester, is engaged in preparing a program of great interest and a large attendance is anticipated.

The American Urological Association will hold its next annual meeting at New Orleans, May 8 and 9, 1903. The president is Dr. Ramon Guitèras, of New York, and the secretary is Dr. F. C. Valentine, also of New York.

The American Association of Medical Editors will hold its next annual meeting at New Orleans, May 4, 1903, at which a large attendance is expected.

The Erie County Medical Association held its annual meeting March 9, 1903, in this city. The following-named were elected officers for the current year: president, Dr. Allen A. Jones; vice-

president, Dr. C. C. Frederick; secretary, Dr. Jacob Otto; treasurer, Dr. William I. Thornton.

THE National Confederation of State Medical Examining and Licensing Boards will hold its next annual meeting at New Orleans, May 4, 1903. Dr. N. R. Coleman, of Columbus, O., is president, and Dr. A. Walter Suiter, of Herkimer, N. Y., is secretary.

THE Buffalo Academy of Medicine held meetings during the month of March, 1903, as follows:

Section on Surgery.—Tuesday evening, March 3. Program: Provisional hemostasis in operations upon the head and neck, George Ryerson Fowler, of Brooklyn; discussion by Roswell Park and others.

Section on Medicine.—Tuesday evening, March 10. Program: Cardiac disease, H. C. Buswell; Local geographic conditions and population as bearing on the water supply and sewerage of Buffalo, A. L. Benedict.

Section on Pathology.—Tuesday evening, March 17. Program: On the cardiac and vascular complications of typhoid fever, W. S. Thayer, associate professor of medicine, Johns Hopkins University, Baltimore.

Section on Obstetrics.—Tuesday evening, March 24. Program: Why minor gynecological operations fail to give anticipated results, S. Goldberg; Some remarks upon ectopic gestation, C. C. Frederick.

HOSPITAL NOTE.

THE Marine Hospital of Buffalo, which has been provided for by Congress, will be located on upper Main Street, between Providence Retreat and the Institute for the Deaf and Dumb. It will occupy three acres, purchased from these two institutions, which will be an appropriate site for an imposing structure, such as is contemplated. Work upon the building will begin at an early day, or as soon as the appropriation therefor becomes available.

BOOK REVIEWS.

PRACTICAL GYNECOLOGY, OBSTETRICS AND THE MENOPAUSE. By A. H. P. LEUF, M. D., Philadelphia. Three Parts, complete in one volume of 326 pages. Published by the Medical Council, Philadelphia, Pa. 1902. [Price, $2.50.]

When the writer of this, which for courtesy's sake is called a review, was handed Dr. Leuf's maiden work on "Practical First Principles" he announced it as a literary curiosity and, in spite of the fellow-feeling which is supposed to exist among associate editors, was constrained to say briefly that much good book paper had been wasted, that the book was hopelessly useless. It was in nowise intended to discourage Dr. Leuf's literary efforts; nor was it expected that he would discontinue his reckless sowing of literary wild oats. Yet in spite of the gentle admonition he has sent forth into an unfeeling and unsympathetic world another volume,—a sort of trinity, titled as above and divided into three parts, which is stated to be "a revised and enlarged reissue of three serial articles appearing in The Medical Council."

The fact that the book is published by The Medical Council makes it easy for Dr. Leuf, for thereby he divides the responsibility for this, his newest bit of careless wastefulness of good paper and binding.

Somehow or other we should miss the bookishness of a collection of printed pages bound in board covers if there were no preface, and Dr. Leuf very graciously gives us a preface which serves a triple purpose,—this being a triple sort of book. It makes the volume complete from a mechanical standpoint; it apologises for its appearance, and it serves to soften the shock of the table of contents which follows. Then, so that we may not miss anything and at the same time be properly impressed with the utter bookishness of the volume as well as the debonair literary atmosphere of the author, we are treated to a Foreword and likewise an Introduction, and then we are plunged into the chapters of Part I.—The General Practitioner as his own Gynecologist, which in itself is an anatomic curiosity when one considers it impassionately.

In his preface, which would be actually criminal to pass over, Dr. Leuf lays bare his heart and says his book is "just as deficient as my own experience has been." A coarse and unfeeling reviewer with little of the milk of human kindness would stop right here, lay down his pen and say something unkind; but the book has a purpose,—it may be to serve as a warning to too enthusiastic young men with literary pruritis,—and we shall let the author tell about it. He is frank about the purpose too, for in the gynecologic section he admits his aim has been to encourage the general practitioner not to send his cases to the specialist. In the Foreword,—we must not pass

over the Foreword either,—he says: "Gynecology is easy of practice; more so than many of the other branches of medicine," and then in graceful strides he tears into his introduction and proceeds to lay bare the secrets which have been imprisoned in his soul's soul. He abhors specialists,—inferentially they are humbugs,—and he says it in language which has the twang of the man who advertises to cure all ills by the laying on of hands. He strays far from the rosy paths of literature where he may gather fragrant blooms, to wallow in the marsh and wander around in an endeavor to bespatter the "specialist." It would be giving him undue and undeserved prominence besides being a waste of valuable space to quote his shrill warnings, yet it would be just punishment, for they read like a patent medicine circular promising a ready road to a rapid and ruddy restoration to health.

As regards the practice advocated by the author,—everyone is an author who writes a book,—little need be said. He doesn't use metallic sutures any more; he uses silkworm-gut and holds it in place with perforated shot. If one would follow his teachings he must needs have an "operating pad. . . . They bring patients to the men who have them." Generally speaking, the tone of the book is egotistic. It deserves a place beside Dr. Leuf's previous work. N.W.W.

THERAPEUTICS OF DRY HOT AIR. By CLARENCE EDWARD SKINNER, M. D., LL. D., New Haven, Conn, Professor of Thermotherapy in the New York School of Physical Therapeutics; Editor of the Department of Thermotherapy in the Journal of Advanced Therapeutics; Physician in charge of the Newhope Hot Air Sanitarium, New Haven, Conn. Octavo, pp 200. Illustrated. New York: A. L. Chatterton & Co. 1903. [Price, $2.00.]

The therapeutic use of dry superheated air has been discussed heretofore in medical societies and journals, but this volume is the first book to treat exclusively of the subject. It records whatever is considered of importance relating to this method of treating certain diseases amenable to the influence of dry hot air. In the first chapter, the necessary apparatus is described; in the second, the physiological action of the remedy is discussed; and in the third, the technics of treatment are presented.

In the remaining chapters up to the twentieth, the various diseases in which the remedy is applicable are considered; and in the final chapter the author presents his conclusions, which offer hopefulness in the future for a further and more general application of the hot air treatment. He expresses the belief that hot air therapeusis is yet in its infancy, and then indicates the field of its future possibilities, citing diseases in which it presents prospects of amelioration or cure.

It is a well printed book, the paper is excellent, the engravings are good, and it deserves critical examination and application.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Comprising ten volumes on the year's progress in Medicine and Surgery. Issued monthly under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume II. General Surgery. Edited by John B. Murphy, M. D., Professor of Surgery, Northwestern University Medical School. Chicago: The Year Book Publishers. 1902. [Price, $2.00; entire series, $7.50.]

This volume is much larger than its predecessor of last year, embracing the same subject. This will enable the searcher to obtain sufficient details, for the most part, without consulting the original articles. Dr. Murphy, being an experienced surgeon, is admirably fitted for the work set before him, and it is difficult to see how it could have been performed in a more satisfactory manner. He has gleaned all the practical material from the surgical literature of the year, and served it up in a fashion that can be utilised with great dispatch and comfort.

Particular attention is paid to what has been accomplished in some of the newer fields of surgery, such as, for example, the surgery of the pancreas, the kidney, and the vascular and nervous systems. Dr. Murphy's operation for fixation of movable kidney will prove of great interest in this relation, and it may be pronounced as the simplest and most efficient of the several operations proposed for this condition. It is well described and illustrated in this book.

Many other subjects of interest and importance are dealt with by the editor, and it will be found to be a compilation of great helpfulness to the country surgeon in particular. It is an index of everything of value that has been published during the period which it covers.

BIOGRAPHIC CLINICS. The Origin of the Ill Health of DeQuincey, Carlyle, Darwin, Huxley and Browning. By GEORGE M. GOULD, M. D., Editor of American Medicine; Author of "An Illustrated Dictionary of Medicine." Duodecimo, pp. 223. Philadelphia: P. Blakiston's Son & Co. 1903. [Price, $1.00.]

A new medical literature is being constructed. We are to go back into the past, exhume the dead, hold autopsies on their remains, and from the examination construct a new pathology. At least that would seem to be the inference from reading this book.

It contains much of historical interest and is a clever study of psychologic ophthalmology. Not only will the ophthalmologist be interested in reading it, but so will those who have been entertained by the writings of the five men who form the subject of this post-mortem clinico-biographic refraction.

To assert that the author has discovered the cause of the ill health of these men of learning with absolute certainty, is more than can be determined with the data at hand, but it is quite probable that Dr. Gould has reached a point in the study that justifies the claim that eyestrain contributed to the conditions from which they suffered. At all events, the book should be

read by all interested in the line of research which it pursues. It is a handsome piece of bookmaking.

Book on the Physician Himself, and Things that Concern His Reputation and Success. By D. W. Cathell, M. D. The Twentieth Century Edition. Eleventh edition, revised and enlarged by the author and his son, William T. Cathell, A. M., M. D. Pp. 411, royal Octavo. Philadelphia: F. A. Davis Co. 1903. [Cloth, $2.50 net, delivered.]

The popularity of this book is unquestioned. It has passed to the age of maturity, to which its preceding ten editions testify, and has become part of the literature that every physician feels must be found in his library. It is a book full of good features, of good advice and of good intent, even though it contains much that is commonplace, and despite the fact that its literary style is, here and there, of questionable form.

Cathell gives excellent advice about writing for the medical press, and especially when he instructs that the title of an article should give some indication of its contents, he hits a solid nail squarely on the head. "Two cases from my note book," "A case of interest" and such titles, are about as silly as they are sophomoric.

This issue far excels its predecessors in letter press, paper and binding and is, in comparison, well entitled to its name—Twentieth Century Edition.

The Development of the Human Body. A Manual of Human Embryology. By J. Playfair McMurrich, A. M., Ph. D., Professor of Anatomy in the University of Michigan. Duodecimo, pp. 573. With 270 illustrations. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, $3.00.]

This book furnishes the student who is inclined to ascertain reasons for certain accepted anatomical facts with the opportunity for interesting studies. The importance of beginning at the foundation in the investigation of any subject need not be debated, least of all when it pertains to anatomy.

A knowledge of embryology is becoming quite as necessary, as any branch of the anatomical field. The mysterious development of the human body should be closely investigated in order to appreciate the facts that a study of gross anatomy furnishes.

Professor McMurrich presents the subject in two parts, the first dealing with general development; and the second with organogeny. The five chapters in the first part begin with the spermatozoön and carry the development to and including the fetal membranes. The second part deals with the development of the organs, and also with post-natal development. While it is a concisely written work it yet preserves the charm of good English, and will prove a great aid to the student of anatomy in obtaining a better understanding of the genesis and development of the human body.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by HENRY W. CATTELL, A. M., M. D., Philadelphia, with the Collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London, with Regular Correspondents in Montreal, London, Paris, Leipsic, and Vienna. Volume IV. Twelfth series. Philadelphia and London. J. B. Lippincott Co. [Cloth, $2.00.]

The subjects embraced in this volume are therapeutics, five articles; medicine, seven articles; neurology, four articles; surgery, five articles; dermatology, one article; ophthalmology, one article; biographical sketches, two; and a monograph on the blood in health and disease.

One of the most interesting, if not instructive, papers in the book is the first one, by Dr. Charles Fox Gardiner, of Colorado Springs, entitled, The sanatory tent and its use in the treatment of pulmonary tuberculosis. It sets forth the value of out-door air in this disease, and emphasises the importance of its continuous employment during the entire twenty-four hours of each day. This can only be done by establishing the patient in a tent, and Dr. Gardiner has devised such a domicile, which not only meets the requirements but is comfortable and home-like. The article should be studied by every physician who treats this class of invalids.

The volume is filled with excellent papers on important subjects and indicates the popularity of this kind of medical literature. The steady improvement in the quality of material has been noted in these columns, and a standard has been reached leaving little to be desired.

A MANUAL OF DISSECTION AND PRACTICAL ANATOMY. Founded on Gray and Gerrish. By WILLIAM T. ECKLEY, M. D., Professor of Anatomy in the Medical and Dental Departments of the University of Illinois; the Chicago School of Anatomy and Physiology; the Chicago Clinical School and West Side Training Schools for Nurses. And CORINNE B. ECKLEY, Demonstrator of Anatomy in the Medical and Dental Departments of the University of Illinois. Large 8vo, pp. 414. Illustrated. Philadelphia and New York: Lea Brothers & Co. 1903. [Price, $3.50 net.]

The student of anatomy needs always a convenient manual for the laboratory. Heretofore most of such have been too condensed; whereas, the anatomical treatise is too elaborate, too cumbersome. The Eckleys have supplied the intermediate book in size and other points which go to supply the deficiency. The structures of the body have been identified with faithful accuracy and every detail of approach has been outlined with studious care.

The preference of students for the anatomical works of *Gray* and *Gerrish* has been catered to, by obtaining from the pub-

lishers of these books a large series of illustrations that never have been excelled for accuracy of detail or artistic merit. Of a total of 220 engravings, 116 are in colors, which, considering the size of the book, affords a wealth of illustration that in quality and quantity is unsurpassed.

The work besides being a guide for the dissector, is also a regional anatomy for the surgeon or prosector,—a combination of usefulness that has never been more carefully worked out. It is a work that deserves commendation from every viewpoint.

Regional Minor Surgery. By George Gray Van Schaick, M. D., Attending Surgeon, French Hospital, New York. Duodecimo, 226 pages. Illustrated. New York: International Journal of Surgery Co. 1902. [Price, $1.50.]

The many serviceable hints given in this book must necessarily prove of benefit to the general physician who, perforce, must practise minor surgery. The text shows the experience of a practical surgeon in its preparation, and the illustrations bespeak the same origin. A few errors in punctuation will no doubt be corrected in a future edition, but they in no way obscure the sense to the practised eye. The book is to be commended especially to the junior practitioner, but may prove a valuable possession to any physician called upon to do minor surgery.

The Mattison Method in Morphinism. A Modern and Humane Treatment of the Morphine Disease. By J. B. Mattison, M. D., Medical Director, Brooklyn Home for Narcotic Inebriates. Duodecimo, pp. 40. New York: E. B. Treat & Co. 1902. [Price, $1.00.]

This instructive brochure is the outcome of thirty years experience by the author in the treatment of morphine disease. It gives in detail his method of treatment which appeals, at once, to the judgment of every scientific physician. It is a disease that cannot be treated by the rule of thumb, but each particular case must receive such care and administration of remedies as experienced judgment dictates. It would be well for every physician interested in the subject of which it treats, to read this book with attention, because it contains useful scientific information upon a subject that appears to be growing in importance as time advances.

Report of the Commissioner of Education for the Year 1900-1901. Volume I. Washington: Government Printing Office. 1902.

This volume contains much information of interest to the cause of education in general, as well as items and statistics relating to schools and colleges in particular,—that is, at home and abroad. It also contains a list of educational periodicals published in the United States, and an educational directory of

names of state and city school principals and college presidents, which must prove of great convenience. But, most important or most interesting of all, it contains a history of the foundation of the Carnegie Institution, at Washington. The aims of this institution, as set forth in the trust deed of the donor are as follows:

1. To promote original research, paying great attention thereto as one of the most important of all departments.
2. To discover the exceptional man in every department of study whenever and wherever found, inside or outside of schools, and enable him to make the work for which he seems specially designed his life work.
3. To increase facilities for higher education.
4. To increase the efficiency of the universities and other institutions of learning throughout the country, by utilising and adding to their existing facilities and aiding teachers in the various institutions for experimental and other work in these institutions as far as advisable.
5. To enable such students as may find Washington the best point for their special studies to enjoy the advantages of the museums, libraries, laboratories, observatory, meteorological, piscicultural, and forestry schools, and kindred institutions of the several departments of the government.
6. To ensure the prompt publication and distribution of the results of scientific investigation, a field considered highly important.

MEMORANDA ON POISONS. By THOMAS HAWKES TANNER, M.D., F.L S. Ninth revised edition, by Henry Leffmann, A.M., M.D., Professor of Chemistry in the Woman's Medical College of Pennsylvania. Philadelphia: P. Blakiston's Son & Co. 1902. [Price, 75 cents.]

It is but little more than a year since the eighth edition of this useful little manual was noticed in these columns. It is important for every physician to keep his mind refreshed in regard to poisons and their antidotes. Nothing has ever been published that equals this little classic for the purpose indicated. In frequent editions revision is made so that the memoranda are kept abreast of the period; and, besides, it can be relied upon as a safe guide, and is of easy and quick reference.

LEA'S SERIES OF POCKET TEXTBOOKS. A Pocket Textbook of Anatomy. By WILLIAM H. ROCKWELL, JR., M. D., Assistant Demonstrator of Anatomy, College of Physicians, Columbia University, New York. In one 12mo volume of 600 pages, with 70 illustrations. Edited by Bern B. Gallaudet, M. D. Philadelphia and New York; Lea Brothers & Co. 1903. [Price: cloth, $2.25 net; limp leather, $2.75 net.]

A condensation of anatomy is of value oftentimes, not only to the student, but to physician, surgeon, and even others who need either quick reference or extended general examination of some portion of the topic. This work has been prepared by an anatomist of experience, and presumably one who knows just what is most needed by those for whom the book is especially designed. It is based upon *Gray*, which is easily the most popular anatomy with students. It is an addition to the pocket textbook series, of which it forms a part, and is a fine specimen of medical bookmaking.

TRANSACTIONS OF THE STATE MEDICAL ASSOCIATION OF TEXAS. Thirty-fourth Annual Session, held at Dallas, Texas, May 6-9, 1902. H. A. WEST, M. D., Secretary. Austin: Von Boeckmann, Schutze & Co. 1902.

The physicians of Texas are entitled to congratulations on account of the splendid state medical association which they maintain, and the excellent report made of its proceedings in the annual volume of transactions which is issued under the direction of its accomplished secretary.

At the meeting reported in this book considerable time was spent in considering the majority and minority reports of the committee on reorganisation, the result of the discussion being to carry it over for a year, and the committee continued to finish its work.

The papers on scientific medicine are of great value and the volume, consisting of 587 pages, does credit to the society and the secretary, whose labors are especially arduous and ought to be appreciated, as, no doubt, they are.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA. Annual Meeting, held at Birmingham, April 15-18, 1902. G. P. WALLER, M. D., Secretary. Montgomery: Brown Printing Co. 1902.

This sterling society, one of the most progressive and best organised in the south, presents its transactions in excellent form and with careful preparation. It holds its sessions during four days, including three evening sessions,—an example that might well be followed by the Medical Society of the State of New York.

The anniversary address of the presiding officer is called "the president's message," and is a paper which sets forth the condition of medical affairs in the state. The book contains reports from the officers, standing committees, the State Examining Board and the State Board of Health; and then follow scientific papers regular and volunteer, together with a list of the physicians in the state grouped by counties.

It is a book full of interest to every physician in the state of Alabama, and many portions of it are interesting to others.

TRANSACTIONS OF THE STATE MEDICAL SOCIETY OF WISCONSIN. Fifty-sixth Annual Meeting, held at Milwaukee, June 4-6, 1902. CHARLES S. SHELDON, M. D., Secretary. Madison: State Journal Printing Co. 1902.

This well-organised and disciplined medical society again presents the proceedings of its annual meeting in good form. The volume likewise is full of good material.

The president's address is devoted in large measure to a discussion of the reorganisation of the society, on the plan proposed by the American Medical Association. He opposed the report of the committee, the society agreed with the president and the subject went over another year, the committee being continued.

The scientific papers are of a superior order, one of the best

being by Dr. Scollard, relating to the diagnosis of fetal position and presentation by external examination. There are, however, half a dozen or more excellent articles of general or special interest, the whole book being of unusual quality.

THE STORY OF A LIVING TEMPLE. A Study of the Human Body. By FREDERICK M. ROSSITER, B. S., M. D., and MARY HENRY ROSSITER, A. M. Duodecimo, pp. 348. Chicago: Fleming H. Revell Co. 1902.

The authors present a physiology book for young readers, written in an attractive semi-allegorical style. It ought to succeed in its object, which is to instil in the young mind that respect and admiration for the body which leads to due regard for the laws of hygiene. The book is attractively printed and bound. M. J. F.

BOOKS RECEIVED.

Diseases of the Stomach. A Textbook for Practitioners and Students. By Max Einhorn, M. D., Professor in Clinical Medicine at the New York Post-Graduate Medical School and Hospital; Visiting Physician to the German Dispensary. Octavo, pp. 551. Third revised edition. Illustrated. New York: William Wood & Co. 1903. [Price, $3 50.]

Report of the Commissioner of Education for the year 1900-1901. Volume II. Washington: Government Printing Office. 1902.

The Internal Secretions and the Principles of Medicine. By Charles E. de M. Sajous, M. D., Fellow of the College of Physicians of Philadelphia; formerly Lecturer on Laryngology in Jefferson Medical College, and Professor of Laryngology and Dean of the Faculty in the Medico-Chirurgical College. Volume First. Octavo, pp. 826. With 42 illustrations. Philadelphia: F. A. Davis Co. 1903.

Proceedings of the American Medico-Psychological Association at the Fifty-eighth Annual Meeting, held at Montreal, P. Q., June 17-20, 1902. C. B. Burr, M. D., Secretary. Published by American Medico-Psychological Association. 1902.

The American Year Book of Medicine and Surgery for 1903. A yearly Digest of Scientific Progress and Authoritative Opinions in all branches of Medicine and Surgery, drawn from journals, monographs and textbooks of the leading American and foreign authors and investigators. Arranged, with critical editorial comments, by eminent American specialists, under the editorial charge of George M. Gould, A. M., M. D. In two volumes—Volume I., including General Medicine. Octavo, 700 pages, fully illustrated. Volume II., General Surgery. Octavo, 670 pages, fully illustrated. Philadelphia, New York and London: W. B. Saunders & Co. 1903. [Per volume, cloth, $3.00 net; half morocco, $3.75 net.]

Harrington's Hygiene. A Manual of Practical Hygiene for Students, Physicians and Health Officers. By Charles Harrington, M. D., Assistant Professor of Hygiene in the Medical School of Harvard University. New (2d) edition, revised and enlarged. In one octavo volume of 755 pages, illustrated with 113 engravings and 12 full-page plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $4.25 net.]

Progressive Medicine. Fifth annual series. Volume I., March, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia.

Octavo, 450 pages, illustrated. Philadelphia and New York: Lea Brothers & Co. [Per volume, $2.50, by express prepaid; per annum, in four cloth-bound volumes, $10.00.]

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof Dr. Carl von Noorden, Physician-in-Chief to the City Hospital, Frankfurt a. M. Authorised American edition, translated under the direction of Boardman Reed, M. D., Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part III. Membranous Catarrh of the Intestines. By Prof. Dr. Carl von Noorden. With the collaboration of Dr. Carl Dapper. Duodecimo, pp. 64. New York: E. B. Treat & Co. 1903. [Price, 50 cents.]

The Surgical Diseases of the Genitourinary Organs. By E. L. Keyes, A. M., M. D., LL.D., Consulting Surgeon to the Bellevue, and the Skin and Cancer Hospitals; Surgeon to St. Elizabeth Hospital, New York. And E. L. Keyes, Jr., A. B., M. D., Ph. D., Lecturer on Genitourinary Surgery, New York Polyclinic Medical School and Hospital; Surgeon to the Out-Patient Department, St. Vincent's Hospital. A revision of Van Buren and Keyes's Textbook. Octavo, pp. 843. With 174 illustrations in the text and 10 plates, 8 of which are colored. New York and London: D. Appleton & Co. 1903. [Price, $5.00.]

Surgical Anatomy. A Treatise on Human Anatomy inits Application to the Practice of Medicine and Surgery. By John B Deaver, M. D., Surgeon-in-Chief to the German Hospital, Philadelphia. In three volumes. Illustrated by 499 plates, nearly all drawn for this work from original dissections. Volume III. Abdomen; pelvic cavity; lymphatics of the abdomen and pelvis; thorax; lower extremity. Philadelphia: P. Blakiston's Son & Co. 1903. [Price: cloth, $21.00; full sheep, $24.00; half Russia, gilt, marbled edges, $27.00 net.]

LITERARY NOTES.

Dental Materia Medica, Therapeutics and Prescription Writing is the title of a treatise of which Professor Eli H. Long, M. D., of Buffalo, is the author. It is a standard octavo volume of 333 pages and is intended as a guide for dental students and practitioners in the topics named in its title. The book has been issued recently from the press of Lea Brothers, Philadelphia, and is in the good style and form for which that house is celebrated. Price, cloth, $3.00.

THE Standard Medical Directory for 1903, is now going through the press. It is a high class book of reference, judged by the volume of last year, and it is anticipated the current volume will far excel the previous issue. It will consist of about 13,00 pages comprising complete directories respectively of the physicians of all North America, colleges, societies, hospitals, sanitariums, mineral springs, publications and in fact everything related to medicine. The new features including an alphabetical index of physicians with post-office addresses and rosters of

practitioners of the specialties will, it is stated, add about one-third to the volume of the work. Published by G. P. Engelhard & Co., Chicago.

The *Bulletin of the Free Hospital for Women*, is the organ of a charity located at Boston, Mass., which presented itself in March. Its first number contains material of gynecological interest. The Bulletin is under the immediate supervision of Dr. William P. Graves, who is announced as assistant editor and resident pathologist at the hospital. Dr. Edward Reynolds is visiting surgeon and editor.

The eleventh annual report of the Charity Eye, Ear, and Throat Hospital, for the year ending September 30, 1902, presents an interesting exhibition of efficient charity work by the physicians attached to the service staff. It appears that during the period covered by the report, 1,337 eye cases, 278 ear cases, and 157 nose and throat cases, besides a number of miscellaneous cases, have been treated.

ITEMS.

The Illinois Central Railroad will furnish to visitors to the American Medical Association a Pullman train from Louisville to New Orleans, under the auspices of Dr. Henry E. Tuley, secretary of the Mississippi Valley Medical Association. The fare will be $19.00—half rate—with $5.00 added for the sleeping berth. Reservations should be made at an early day, by addressing Dr. Tuley, 111 Kentucky St., Louisville, Ky.

Battle & Company, of St. Louis, recently published Chart No. 11, of the series illustrating fractures of long bones, which depicts in a graphic manner fracture of the shaft of the radius. In this fracture the upper fragment is drawn forward by the biceps and rotated inward, over the ulna, by the pronator radii teres, to a position midway between pronation and supination. The lower fragment is drawn inward and slightly pronated by the pronator quadratus; at the same time the supinator longus, by elevating the styloid process, depresses the upper end of the lower fragment still more toward the ulna.

These phenomena are admirably illustrated in color by the

drawing. This fracture is best reduced by flexing the forearm on the arm, placing the hand in a position midway between pronation and supination and making extension from the elbow; and the bone should be retained in this position by well-padded lateral splints extending from elbow to wrist, or by the application of a light plaster-cast to arm and forearm.

The Oppenheimer Institute, of New York, with branches in Philadelphia, Pittsburg and Detroit, has sent out an address to the medical profession, asking its support and confidence, and promising to conduct its affairs on scientific and ethical lines. These institutions (see advtg. p. xxxiv.) are established for the treatment of cases of alcoholic intemperance and drug addiction, including opium and its derivatives; cocaine, chloral, arsenic, tobacco, and, in certain cases, neurasthenia. For general information in reference to the business, printed matter, and the like, write or apply to the executive offices, 170 Broadway.

Monsieur A. Mariani, of Paris, who is known everywhere throughout the world as the originator of Vin Mariani, has published a second edition of the album of eminent physicians, which was first issued some years ago. It contains 32 wood cuts and biographical sketches of medical men in France, who are well known for their scientific attainments and high professional standing. The engravings are works of art and the album is attractive in its make up. For copies address Mariani & Company, 52 West 15th Street, New York.

The New York Pharmacal Association of Yonkers, has lately issued a brochure, entitled, *Clinical Examination of the Gastric Contents*, designed to furnish physicians with a condensed, but comprehensive working guide for the chemical examination of the contents of the stomach. It describes the most approved methods of making such examinations, deals with the interpretation of evidence found in abnormal conditions, and presents a brief diagnostic review of the commoner diseases of the stomach and their influence upon the gastric secretions. This method of advertising is to be commended, because it gives scientific information in an attractive and easily accessible form. The monograph is appropriately illustrated.

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ORIGINAL COMMUNICATIONS.

Popular Medical Education; Its Aid in Limiting the Spread of Disease.[1]

BY J. D. MACPHERSON, M. D., Akron, N. Y.

The night of fable and the twilight of conjecture.
What was yesterday a theory, is today a condition.

PRIMITIVE man in his rude tepee, as he ministered to his loved one in its bark hammock and watched with unavailing eye the ravage of disease in the flicker of his uncertain firelight, paused often in his comfortless vigil to invoke the aid of the Great Spirit for the staying of the malady which came and which worked in form insidious and unknown to him. At once father and physician, as he threw back at dawn the flap of his tent, the grey light of morning showed him that death's relentless hand had taken as his toll the child and patient. What must have been the overwhelming sense of helplessness that came to him? He was fit for meeting the contingencies of life upon every level except that of disease. His strong arm might protect the inmates of his home against the foemen; his intelligence secured for him food in stream and forest; instinct blazed before him the path of duty and cleaved for him the separation between right and wrong.

But here was he at bay. The smiting plague was he impotent against. He beheld effects; of causes he was ignorant. Disease was to him an ambushed foe; the source or direction from whence flew the poisoned barbs was to him unknown. And yet he had good ideas of symptoms and was in his way an expert diagnostician. Exanthemata upon other members of his family or his tribe were as patent to him as the heaven lowering rain or

1. Read at the annual meeting of the Gross Medical Club, January 23, 1903.

the track of wild animal in the chase. The hectic flush, the wasting form, the fever lit eye, the extravagances of delirium—all these were to him as a tale that is told. But the tale had always the one and only ending. Ever the silver cord was loosed, and the golden bowl was broken. Man set out to his long home, and the fierce tide of the battle charge or the calm deliberations of the council circles knew him no more. The Evil Spirit had conquered.

Small wonder, then, that we see this man of the world's youth time, turning from his circumscribed realm of the seen and seeking far afield the ministry of the supernatural. Small wonder that he strove with all that in him was to go beyond the short tether of sense, in the invoking of spirit's aid and the offering of sacrifice in the form of treasure. It was the age of charm and amulet, the weird music of the incantation of the sorcerer; the era of the medicine man, remedial with roots and herbs.

Ancient history is full of the ravages of plague. In the Iliad of Homer we behold the army of the Greeks devastated by disease and halting for weary months to propitiate the angry gods. Hecatombs of kine and of sheep ascend from the kindled altars in smoke and savor of burning flesh, while the air is laden with the breath of incense.

Yet even in those fragrant days of a storied past the restless mind of man was seeking, as for hidden treasure, the knowledge of the dread bar to human progress in the guise of disease. Man gropes, but he gropes persistently. If he hopes ever so faintly, yet doth he still hope. And it has been this hope in the heart that through all time has nerved him to the seeking out of the hidden cause of things. Disease was the manifestation, symptoms the phenomena, of something behind the opaque wall of the seen. In the past, the ministry of medicine has been largely to the shadowy manifestation and humanity has made the prayer of Ajax its own, that it might have light if only to see its foeman's face.

This has come with the perfecting of the oil immersion lens. This lens gathering up the waves of light has focussed them upon the lurking places of hidden cause. It has been reserved for Nineteenth Century man to get the first straight look at the arch enemy of mankind. The data he has thus collated has been correlated into a science by itself. Bacteriology is the one thing that makes prevention of disease possible. A glass of

water is found to contain creatures more deadly in their potentiality than the huge, unwieldy beasts of the Mesozoic.

The microscope shows that the great foe to human life lives; that it is an entity. Like ourselves, it has a birth and a death. To survive, it must be fed. To grow and thrive its habitat must be rich for its nourishment. To sterilise the habitat, therefore, makes the death of this elusive being surer and reduces propagation of the species to a minimum. With these facts learned, the science of prevention opens before us a realm immeasurable in extent and limitless in suggestive possibility. Our profession has not been slow in entering upon this rich heritage. But the great battle has only begun. With the enlarged vision of our microscopic eyes, we have discovered, it is true, the omnipresence of our foes. And now, like true generals, we must post our sentinels upon each coign of vantage. Our search lights must seek out the hidden things of field and trench, of woodland and hillside, of sea and air. For the mighty hosts of bacteria swarm by the countless millions, using every means of transportation from the tiny atom for an air ship, to the giant ocean liner. Our foes are small and, in order to sweep clean, our brooms must be of fine quality and of incessant and assiduous use. Expert clinicians in the field, exact experimenters in the laboratory, a definite knowledge of the habits of bacteria will soon tell upon the mortality claimed by disease. When Edward VII. was crowned to his kingly station, there was crowned likewise a man behind the throne in the person of Lister, the father of antisepsis.

The tendency of all knowledge is toward synthesis. The medical science is no exception to this rule. Diseases to which have been given their appropriate and almost countless nomenclature, will be found on last analysis oftentimes to be caused by the same germ working in different habitat.

That knight-errant of modern medicine, Professor Koch, of Berlin, has by analysis and grouping, following accurate experimentation in the laboratory, resolved the old time lupus into but one of the many manifestations of tuberculosis. Scrofula, likewise, has been thus reduced to its common denominator. The medical profession has now a firm grasp, that is ever growing firmer, of this great fact. What is now needed is the education of the masses in order that their intelligent coöperation shall be obtained.

That they will give this coöperation when once the field has

been opened to them, is seen in the manner in which the farmer attacks the parasites invading his orchard and his grain field. He has learned from the experiments of our surpassing agricultural stations how best to attack these foes of the husbandman. These are the clinical laboratories from which come the expert knowledge that builds an exact science, and which spreads through the medium of farm journals, containing rules for diagnosis and the appropriate treatment for each individual pest. The wide dissemination of such literature among the intelligent and reading agricultural classes, has made the entire country conversant with the process of extermination. If farmers can be taught to preserve their crops, they can also be taught to follow the laws of health. These laws may be codified in three great departments,—hygiene, sanitation, and therapeutics. The first two of these are for all mankind; the third is the realm of the scientific medical practitioner.

We who were born in the past century should bequeath to our children a better physique, a more enduring constitution and better mental capacities, than possessed by the generation just passed. Life becomes more and more strenuous, competition more and more keen, and the law of the survival of the fittest will receive clearer emphasis in the future than in the past. It follows, therefore, that a life of larger demands necessitates a better bodily machine and consequent superior mental equipment. A proper knowledge of the needs of the physical system and the safeguards for its healthful maintenance should, at the age of 15, in this generation, be a more real possession than it was at 50 in the past generation. Our immediate descendants should instinctively select that for which we had to delve. They should carve what we have hewn. The first essential in prevention of disease is that which shall upbuild the whole man with proper physical endowment, on the principle of a sound mind in a sound body.

Sanitation should be so perfect as to make it impossible for an unsanitary home to exist from the standpoint of public opinion alone. But it has ever been true that what is everybody's business is nobody's business, and public opinion is powerless unless crystalised. It should, therefore, be the province of the state that upon the appearance of an unsanitary home in a given neighborhood, there should be the same procedure as at the outbreak of diphtheria or scarlet fever. Such home should be quarantined at once and the sanitary office,

through its appropriate representative should afford an immediate and effective cleaning. Tenement districts should be inspected by district physicians, and sanitary inspectors should be provided whose vigilance should be severe and unceasing. The recent cleansing of the Cuban cities by General Wood, shows what can be done by a corps of sanitary engineers working under the surveillance of strict military régime. Some of the effectiveness of the military idea might properly be carried over and applied by the health officers under civil law. In Havana, formerly a center where yellow fever was indigenous, yellow fever no longer exists, because its native habitat has been sterilised through the employment of proper sanitary measures. Compulsory laws will, in one decade, start a community on the road to a condition where sanitation is the rule, not the exception.

The recent enactment of laws against expectoration in many of the cities of the country, is one of the powerful agencies directed against the propagation of tuberculosis and reveals, as in a flash, to the spitter the reason why he should not spit. This is but suggestive of the time when our alleys and sewers shall be flushed with antiseptics. The invasion of deadly gases in cities, whose plumbing is constantly improving, has been reduced to a minimum. The use of the incandescent light in places hitherto dark and the native breeding places of germ propagation, has opened their crannies and recesses to the beneficent action of sanitary endeavor. The large improvement in ventilating systems will also cause great changes to occur in the architecture of the future. Fresh air and sunlight, and electric light as well, have proven themselves to be the most direct enemy furnished as yet for the destruction of bacteria. Linked to these agencies, scientific hygiene and sanitation form the real key to the active propaganda of limiting disease.

The application of this hygiene should begin in the home. Here, as in all things else, the home is the real fountain. Whether this source shall be contaminated or not, depends upon the popular appreciation of the science of prevention. The physical environs of the home should have first consideration.

If the sanitary conditions in large cities were half as bad as exist in the rural sections of the country, the death-rate would become equal to that in time of plague. City people oftentimes come out to the country to obtain fresher air and purer physical environs, than to the old time idea exist in cities.

But do they always get these things? Many times they come to an old homestead very picturesque amid its foliage of overshadowing evergreens. Here, by all the conventions of the past, a convalescent should be charmed back to health and contentment. But of late the gloom of sickness has detracted from the beauty of the landscape and the old home becomes deserted, so much sickness occurring that the place is deemed unhealthful. The causes of this will be found in the sewage-soaked soil, the shade effectually preventing air and sunlight from penetrating its damp recesses. Inspection reveals cellar walls fuzzy with fungi and spores and the rooms smelling musty. The parlor where the city guest was placed, always needed a little fire to take off the chill. The sluggish drain as it meandered into the back yard, had long since become choked with weeds and refused longer to carry the waste from the sink which, unheeded, trickled down the clapboards; the old piece of eavestroughing which aforetime carried it away from the house having long since collapsed. The closet was a rickety old piece of architecture hidden among the clump of lilacs, with vault a one time hollow in the ground and enough to last a century. And near it the well, with its old oaken bucket, reeking with germs. With germs? I hear some one say! Well, only God, in His infinite wisdom, could build a wall of masonry solid enough to protect the progeny of the old time country family against disease and consequent death. Have I drawn this too strongly? I do not think so, for its demonstration is but a question of distance from urban center.

Such conditions as these are unnecessary and without excuse. The thorough disinfection of the soil when surcharged by moisture should be accomplished. Cesspools should be covered with fresh earth after being subjected to sterilising treatment. The old closet should be torn down and burned. A new vault should be excavated at a suitable distance from the well, with sides and bottom cemented to prevent leaking. Proper drainage should be given to the sink, with proper plumbing installed. Old decaying beams and boards should be chopped from cellar walls and ceiling, and replaced with new material. Disinfection of the cellar floor and walls should be effected by whitewashing, and the drain therefrom flushed by antiseptics. A vigorous trimming of the shade trees should let in sunlight and provide for proper air circulation. Suitable windows should be arranged for the free passage of air through the house

and cellar. Not until then will the old homestead be fit for human habitation; much less as the place of convalescence for the city sick or the city rest-seeker.

The disposal of sewage in country villages and farm homes is often a very troublesome problem, from the fact of houses often standing on the level, with no fall for the carrying away of waste through pipes. The other fact, that streams flowing through villages belonging to the so-called potable waters of the state, and not being free for use as openings for sewers, makes the problem more intricate still. The slop waters and kitchen refuse is most frequently dumped into the back yard, often a few feet only from the house. Ashes and broken crockery are allowed to accumulate for years. The ash heap often becomes the receptacle for discharges in sickness, until the arrival of a physician pronounces the disease contagious. Even then the discharges are often buried without disinfection. This should never be done without a thorough drenching by antiseptics of the vessel containing such excreta, sputa, or other infected material. After that, burying would be reasonably safe.

Thus, looking to the prevention of sickness, we can by sanitation and careful selection of building sites for homes, eliminate a great many diseases. In choosing a location for a residence we should first examine the adjoining premises as to whether contamination could arise from an unsanitary condition of either of the lots adjoining our prospective site. The one of our selection should have a reasonable slope from the house to the rear, or so arranged that a slight filling could accomplish this.

The greatest attention should be paid to the drainage of the cellar. Proper plumbing for sink and cellar drains should be had, arranging the plan of building to admit western sunlight into as many rooms as possible. It is very necessary that the west wall of the cellar should have one or more large windows where sunlight can be admitted, as without occasional sunlight cellars will become damp and musty. The whole situation may be secured by starting right. No refuse water or slop should be thrown upon the ground. There should be a large galvanised pan made with cover for kitchen refuse which should be transported and burned. Thus, country homes could always be kept pure and maintained under healthful conditions. But the ideal rural home, from a sanitary standpoint, with, of course, some few saving exceptions, is of the future.

Many times when afflicted with some plague, the appeal of the ancients to the Great Spirit would be answered by the sorcerers suggesting a change of residence. The camp having become filthy and germ laden this expedient was often effectual in staying the ravage of the disease. Their possessions being scanty and abandoned at time of removal, most of the infected material was thus left behind. This accounts in large measure for the health of many of the vigorous races of antiquity. When their camps were pitched in a malarial district and ague became common, removal to an elevated position effected a cure of the scourge. So, also, a change of diet would be had in their change of camp from a hunting plateau to the sea shore, where the food would be changed from game to fish.

Another factor in keeping a race inured to such a life, hardy and so physically perfect, was owing to the fact that their mode of life was an exemplification of the survival of the fittest. The disease-affected and consequently weaker part of their population dying off early in life, prevented propagation from other than healthful stock. Thus, we find our Indian, before the appearance of white people, to have been physically an almost perfect race. Their degeneracy is not so much due to disease introduced by the white people as to change in mode of life. Instead of getting the benefit of a change in sanitary conditions following frequent migration, they are huddled together on small reservations and live in badly ventilated houses. The old free life is gone and poor Lo becomes in our time an example of physical degeneracy, from his lack of opportunity in applying his intuitive knowledge of primitive medicine which, in its broad sense, meant to him proper sanitation, diet, climatology and the like. The immunising of animals can be effected, we know, by frequent innoculation with some given disease. So, no doubt, does man become immune from many diseases, by the frequent traversing of his system by the same form of germ life. For instance, those living in malarial districts for a generation will not be affected by the malady, but let a stranger come among them and he is soon stricken.

Wells used for years for drinking purposes by immunised families will not infect them, but a person being a transient visitor to this home, and not accustomed to this water, will soon develop typhoid. This fact would seem to account for the great mortality obtaining among the Indian tribes from tubercular affections. Breeding from healthful stock, their history

for ages shows them to have almost, if not quite, weeded out tuberculosis from among them. Their sudden change of habits to a more unsanitary mode of life has led to the devastating inroads of this disease, having secured a habitat in their midst. Their blood containing none of the immunizing serum of previously infected generations, presented virgin soil for the disease and thus they fell an early and sure prey to phthisis.

The sanitation of cities is a much simpler matter than confronts the health officer in the smaller town. Many of these, like my own, are possessed of a water works plant, but are without a system of sewerage. Under these conditions, a vastly greater amount of water is being used than under the old pump system. Consequently the area of soil-contamination becomes vastly greater. Many old wells, cesspools, and such like, being used as outlets for drains, the ground soon becomes impregnated with bacteria. No sewerage being furnished, the best method known to the laity in their germaphobia is to bury the discharges. This is most generally done without disinfection and adds greatly to the unsanitary condition of the water-impregnated soil. In large cities sewerage is easily provided for under the tax system. In smaller towns the rental revenues are not sufficient to withstand such outlay. The consequence is that a sure method of cheaply disinfecting sewage devolves upon the individual, and is very much desired by the health authorities of such places. This disposal of sewage generally takes place upon or near the playground of the village children, and thus becomes a menace to their health in a way not accruing to the city child. The back yard of rural homes being the natural playground of childhood, children are thus subjected to the danger arising from infected ground, and thus their vitality is in constant danger of infection and consequent weakening, at the very period of life when nature is trying to dower them with health for future years. Thus, their playground instead of being an aid becomes a menace.

This suggestion upon prevention of disease might be of the utmost help, but before any radical change comes about in the conditions of the scattered homes of the rural population, there must begin a campaign of education among the masses, without whose coöperation, sanitation is a dead project. Disease will laugh at our efforts. One man may clean up, but his neighbor over the fence flushes against him; and what is he going to do about it? There is no officer to enforce the law; no one wishes

to have trouble with the uncouth one who sees no use in being clean, and thinks his neighbor a crank upon sanitary matters.

Prevention of disease, again, is largely a matter of taking care of the children. Especially is this true when looking at the subject from the standpoint of the home.

At the first step we find ourselves confronted by the greatest of modern problems,—the providing of milk which will be suitable for infant life. This is the prime staple of young animal life and unless it be pure the result is not difficult to foresee. Only those who have made a study of the sanitary milk question, can conceive of the appalling mortality directly attributable to its contamination. The transportation of milk by the present methods in cans, which might justly be called giant bacteria-culture-tubes, is an indication of the patience or the stolidness of the public-general. The cleansing of these cans should be done in the city at a sanitary depot by steam or other effective process. Afterward, they should be shipped to the dairy or farm, sealed in such a way as to prevent any possible source of contamination. Our present high rate of mortality, especially among infants, is due to nothing nearly so much as crude methods of sanitation. Trusting a situation demanding the exactest scientific treatment to the hands of an uncultured farmer, whose knowledge of hygiene has never been considered in any age as being above par, and who is often too lazy to do the extra work demanded and too greedy of income to care much for nicety, is sheerest folly. A more careful attention to the care of milk, would safeguard the life and future of the little one against the bacillus coli, one of its greatest enemies. It is tuberculosis, that effective destroyer, that breeds in the filth along our streets, breathes into our faces in every corner, and caught with every gust of wind fills our lungs with his deadly microisms. This is the insidious demon, that until twenty years ago, careered up and down our land secure in his position of being but a hereditary legacy, nine-tenths of the medical profession believing that this malady was not contagious. But now, thanks to the all-seeing eye of the microscope, we know whereof we speak, when we insist that at birth is the proper time to establish the great preventive cordon.

Dairy animals should be tested for tuberculosis before the milk is furnished to the consumer. A tuberculous mother should not be allowed to infect her child. Here is where the education of the masses should begin and such education should be made

compulsory. Without the intelligent coöperation of the people, law enactment is of no benefit in the premises. Lectures regarding the transmission of disease should be delivered in public. These should be of frequent occurrence and could be made of great interest. Sanitary classes in public schools should become a part of the curriculum. The training of the children of our time is of the utmost importance here. From their enlightened efforts will come that great crusade against the most direful of all time plagues—tuberculosis. A tuberculous mother who will heedlessly infect her babe against all the warnings, teachings and instructions of this enlightened age, is guilty of a crime and should be treated as a criminal. Therefore, the efforts of the medical profession should be used in one grand effort to make the masses familiar with the means of infection, and thus be on their guard. Here, indeed, is an ounce of prevention worth a pound of cure. This familiarity should include as well the remedies and means to be used against the wholesale spreading of the disease. The laity would assist as assiduously the health officer in the stamping out of tuberculosis as he would in the warfare against diphtheria, provided the hatchery process of tubercle was as short as that of diphtheria. He could then easily reason from cause to effect; but where the effect issues only after possibly years of good, not to say robust health, naturally he loses sight of the cause.

It is in the home, likewise, that habits of personal cleanliness should be inculcated.

A proper care of the teeth and their consequent preservation for the function assigned to them in the physical economy, would go a long way in the prevention of physical disorders. Food, to be assimilated, must be properly ground. Without assimilation the body is not properly nourished and in its weakened state falls an easy prey to disease.

Cases of stomatitis and pyorrhea in children or adults should receive the most careful attention. That this is one of the avenues for the rapid infection of the glandular system is beyond any doubt. An inspection by a physician in school, for instance, will reveal the fact that a large proportion of children have enlarged cervical glands. This will be found to arise from the absorption of matter from carious teeth. How often this matter is loaded with tubercular germs could only be ascertained by the subsequent history of the case. But that the germ of tuberculosis enters the system by this avenue more frequently than

by the inhallation process or food infection is, to my mind, an established fact. At all events, the evidence in hand that pus products do enter by this avenue should be the ground for eternal vigilance, that tubercular products be given no opportunity of entering with them.

Then the vessels in daily use by tubercular patients are very rarely cleansed by water which approximates anywhere near to the boiling point, the result being that bacteria adhering to them pass without proper method of destruction. Perishable and easily infected food should be kept in well-ventilated refrigerators, and not in cupboards or cellars. All these things perhaps of seeming unimportance must yet be taken into consideration in the matter of disease transmission.

There is no doubt that substances contaminated with germ life reaches our anatomy by and through the agency of flies. Hence the practice of burying typhoid excreta, or any other sputa or excreta, without proper disinfection is highly reprehensible. The germs from such refuse are undoubtedly brought to the surface of the soil by the heat of the sun, and may then be blown by the wind or carried by the feet of insects to great distances. All discharges should be thoroughly disinfected by the most rigid means before being buried, and thus we would limit the number of our typhoid patients. The contamination of the soil means the contamination of the water supply and consequently the epidemic form of the disease.

The subject of popular medical education as it touches upon the school and school days of man is highly important.

It would not necessitate any great powers of discernment in teachers, nor expert knowledge in the matter of materia medica, to make them competent for detecting the symptoms of many childish ailments. And it would be a very blessed thing if the curriculi of our normal schools provided our teachers with some training, that would allow them to seek out such symptoms in the children committed to their care. Here would be a safeguard and an effectual barrier to the gaining of a foothold of many an epidemic of diphtheria or scarlet fever.

As the child enters school and mingles with its fellows the danger of zymotic infection increases from the crowding at school. Here the ventilation is often abominable, buildings badly heated and always full of dust, although it may be that a school room without dust would be an impossibility while the romping American youth exists. However, a proper disinfec-

tion of floors and furniture should frequently be given. This would lesson the number of germs which constantly accumulate in public buildings.

Teachers should be taught to recognise the exanthemata, and a course of instruction put into the curriculum of their normal preparation and instruction, should be given by a physician chosen for that purpose. Many times an epidemic could be prevented and lives saved by an observing teacher who, during the quiet of school hours, would be able to recognise the cough and bleared eyes of measles, or the vomit or flush of scarlet fever. Thus they would learn to send an ailing child from school to a health physician appointed, who would place the child under proper supervision.

All schools should be provided with modern drinking fountains. The old tin cup should be consigned to the age of infection. These fountains are in place in many institutions and allow drinking direct from the jet, without the person touching anything except the stream of water.

It has been proven beyond peradventure that the kissing of infants, and feeding them or administering medicine from the same spoon, are most potent ways of mouth to mouth infection. Great care should be exercised and the fatuous and really meaningless act of kissing a child upon the mouth should be abolished, and its repetition considered to be a crime. The child has no part whatever in kissing. It does not reciprocate the attention though it may unwittingly become the recipient of the most hurtful legacy, which a fond friend or ancestor could bestow. One great mistake of the past was in the belief that people of advanced age did not have tuberculosis, hence grandmother was allowed to kiss and fondle the child with impunity, while a young person might possibly have been barred. It has been abundantly proven that the chronic coughs of old people almost always arise from the action of tuberculosis, and consequently the sputum teems with it. Other diseases besides tuberculosis may be warded off.

In incipient catarrhal conditions great attention should be paid to the condition of the nose and throat. The maintenance of a healthy condition in these two organs, does as much to prevent inroads of pneumonia and diphtheria as any other thing. Enlarged tonsils and adenoids should early receive attention, thus permitting the freest oxygenisation in the lungs of the child. Here again the throat, being free from obstruction and spongy

growths, is not so apt to be a prey to bacteria and is more easily cleansed. If diphtheria should occur, it presents less than half the surface for membranous infection. A child presenting the slightest throat symptoms or nasal discharge, should be isolated for a long enough time to be thoroughly cured, and clothing and person disinfected. It is usually the slightest case that passes muster. Thus the disease is spread. No great danger attaches to a bad case of scarlet fever, diphtheria or smallpox because the quarantine will, of necessity, be rigid.

The close affinity of lacunar tonsilitis and inflammatory rheumatism, would indicate that perhaps other germs than those we can demonstrate gain access to the human economy through tonsillar channels. Slight sores in the nose of a child should receive prompt attention, as they often rapidly develop septic symptoms and before one is aware of the gravity of the situation the patient is beyond human aid. The post-nasal space is so enormous, that a wonderful floor space is afforded these germs on which to hold high carnival before one is aware that the dance has begun. A thorough cleansing with peroxide of hydrogen by the nurse or doctor, should be done often during the course of even mild throat lesions. Frequent visits and eternal vigilance should be the rule in cases of this kind.

Ophthalmias and eye lesions should receive the promptest of attention. Their preventive treatment is most exact and its early administration will often sweep away the disease like a cloud. We have only to go to our blind asylums and ask at what age and what the cause of the blindness, to ascertain whether parental education would have lessened the number of dependents in our state institutions. It is safe to say that one third at least would be shut out, and this beautiful world would have been revealed to thousands now groping in hopeless night. What an appeal for popular education is this? Deafness, likewise, in thousands of cases would have been missed, had only the auditory canal been properly cleansed and disinfected in the earlier stage of life. Deafness could be greatly limited by a careful treatment almost entirely to nerve disease.

In conclusion, let us say that this essay is not intended as an exhaustive treatise. It is only suggested in order to awaken enthusiasm in a field practically new, and whose realm is illimitable.

The Diagnosis of General Paralysis of the Insane.[1]

By WILLIAM L. RUSSELL, M. D., Willard, N. Y.,
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AT THE last meeting of the Medical Society of the State of New York, at which no doubt many of you were present, a very able paper on the early diagnosis of paresis was read by Dr. Dercum, of Philadelphia. To some it may seem that a further contribution to this subject, unless to present something entirely new, is at present scarcely called for. I may say, however, that the idea, of presenting this paper was in fact suggested from reading that of Dr. Dercum. His paper discussed only the very earliest stages of the disease, when diagnosis is often extremely difficult. The importance of recognising not only this, but all other forms of mental disease at this period of their development, can hardly be over-estimated, and the writer wishes only to emphasise this importance. By the time cases of general paralysis and in fact, nearly all cases of mental disease are committed to hospitals for the insane, a very long period has elapsed during which an intelligent diagnosis and treatment would have been of inestimable value to the patient, his friends, and to society.

The writer has for several years observed that of the cases of general paralysis admitted to the Willard State Hospital, so far as can be judged from the statements in the medical certificates, and from correspondence with the physicians who signed these, a very few have been diagnosticated before admission. This is not said in a spirit of criticism, but simply as a statement of fact. In most of these cases the disease is well advanced, and the symptoms not at all indefinite. Many of them are recognised as cases of paresis by the nurses who bring them to the hospital. The average practitioner, however, was not, during his student days, trained to make a systematic examination of an insane person, nor to appreciate the diagnostic and prognostic significance of the symptoms presented, and after graduation sufficient opportunities come only to a few. It has seemed to me, therefore, that it might be permissible at this time to supplement Dr. Dercum's paper with one of a more elementary character, in which, while the importance of early diagnosis was emphasised, the salient diagnostic features more or less

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 21, 1902.

common to all stages of the disease might be presented as simply and clearly as possible. Without a knowledge of these, early diagnosis is impossible; with this knowledge one symptom in an obscure case may furnish the required clue.

General paralysis is, unfortunately, at present a hopelessly progressive and incurable disease. If there is ever to be effective treatment, it would seem as though it must be applied at the earliest possible moment, not perhaps months after the patient has first consulted his family physician. Even with the present hopeless outlook, however, and in fact in some instances because of it, there are important reasons why the disease should be recognised by the family physician. The patient needs protection from the effects of his abnormal mental condition. There is sometimes manifested, even in those who in health were temperate and moral, a disposition to excesses, petty crimes, and gross immoralities. Thus, a previously irreproachable character and unblemished reputation, may be irretrievably marred, and the domestic relations of a lifetime broken up, the physical collapse of the patient being at the same time much hastened. The financial interests of the patient, embracing also those of his family and of his business associates, may be jeopardised. He may squander large sums in dissipation, but aside from this, there is an impairment in memory and judgment, which, long before his intimate friends realise the real condition of affairs, may lead to ruinous business mistakes and neglect. Besides, many of the patients whatever their previous disposition, become generous, benevolent, easily imposed upon; and, if in addition to this, as is often the case, delusions of wealth and grandeur be present, even a large fortune may be literally given away. It can be readily understood then, that personal, family, and business interests of the greatest importance may demand that an intelligent diagnosis and the consequent prognosis be made.

In examining a person suspected of mental disease, the same systematic methods should be followed as are customary in making examinations for physical disease. Hereditary tendencies should be inquired into. The main facts concerning the life and conduct of the patient from childhood up should be ascertained as far as possible. The history of the present illness from its earliest inception up to the time of the examination should be obtained, and the salient features put together and scrutinised as a whole. A minute physical examination should

always be made, if the condition of the patient permits. In the course of such an investigation as this, the possibilities, and then the probabilities as to nature of the disease may be very early suggested. The examiner must then follow the various clues and discover where they lead. In weighing the probabilities as they may relate to general paralysis, there are certain etiological factors, which the examiner will do well to keep in mind.

1. General paralysis is a disease of modern civilisation. It is practically unknown among the uncivilised, and scarcely can be said to exist in the more remote rural districts of civilised countries. It is met with more frequently as the vicinity of towns and cities is approached, and reaches its maximum prevalence in the larger centers. The disease affects all classes of society. It is most frequently met with in persons of considerable activity, physical, mental, or both, especially those who work hard and at the same time because, of dissipation or for other reasons, do not take sufficient rest to recuperate their exhausted nervous system.

2. Absence of hereditary tendency to mental and nervous diseases, is more frequently observed in cases of general paralysis than in other forms of mental disease.

3. General paralysis is at least four times as frequent in the male sex as in the female.

4. The large majority of the cases occur between the ages of 35 and 45, the average age being about 38. The disease, however, may appear at any age. There have been a few instances in children, the victims of hereditary syphilis, and it is not infrequently met with in persons over 50, and even over 60.

5. The relation of alcohol to general paralysis is still unsettled. It is safe to say, however, that it is more frequently found in those given to dissipation of all kinds. It is occasionally seen apparently as a result of lead poisoning.

6. That syphilis is one of the most potent factors in the causation of general paralysis, modern authorities are agreed. Krafft-Ebing goes so far as to refer to the disease as the product of civilisation and syphilisation, and there is a strong inclination on the part of many to look upon syphilis as the essential causative agent. A history of syphilitic infection in the individual would therefore be suggestive. The difficulty of obtaining accurate information on this subject is, however, well known. It is possible for a person to be ignorant of his infec-

tion. There is also nearly always an inclination to concealment. In relation to general paralysis, not only acquired but hereditary syphilis must be considered, and the difficulties are further increased by the fact that the statements of the sufferer from mental disease are often entirely unreliable; and as there may have been no active signs of syphilis for the preceding ten or twenty years, the friends may be unable to give any information whatever, or may be led to make an unwarranted denial.

Given, therefore, a male patient of the proper age with a progressive mental disorder however mild, accompanied by general nervous and muscular disturbances however vague, whose history indicates previous good health and activity with special freedom from such neuroses as neurasthenia, hysteria, and the like, with an inclination toward a strenuous or fast life in business or pleasure, who has inherited no special tendency toward nervous or mental disease, and who has several years previously been infected with syphilis, or whose habits and mode of life afford ground for suspicion of infection, and the presumptive evidence is strongly in favor of general paralysis. The conditions are, however, rarely so nearly typical. The patient may be a woman. In such cases she usually belongs to the uneducated classes. She is almost invariably married or else a prostitute. Otherwise, the points to be considered are the same as in the case of a male. A hereditary tendency to neuroses or insanity may be discovered. This is by no means uncommon and, in fact, some observers claim to have found it in the majority of their cases. The patient may be older or younger than the ages at which the disease prevails most. No suggestion nor suspicion of syphilitic infection may be obtainable. And yet, upon examination, it may still be found that there are reasons for suspecting general paralysis. In such cases, the weight to be attached to the information obtained will depend upon the history of the present illness, and the results of the personal examination of the patient.

The early history of general paralysis has been well described in Dr. Dercum's paper, as are also the differential points by which the disease may be distinguished from neurasthenia, the condition for which it is most likely to be at first mistaken. As explained by Dr. Dercum, the distinction can in most cases be made by bearing in mind the clear and well-defined symptomatology of chronic fatigue—neurasthenia—on the one hand, and the special symptoms of the mental weakness and degeneration of

paresis on the other. It sometimes happens that the history gathered by the examiner may be alone sufficient to establish the diagnosis, the personal examination simply confirming what was practically already a foregone conclusion. Often, however, enough only is obtained to suggest the possibility of the disease. The details must then be gathered by investigation and pieced together. In this process the point to be especially kept in mind is that the characteristics of the clinical picture of general paralysis, is the *concomitant* appearance of mental and physical symptoms. On the mental side there is progressive dementia, to which is generally superadded insanity of the maniacal, melancholic, or confusional types; on the physical side there is paresis and incoördination of certain parts of the motor mechanism, with partial degeneration of the osseous, cartilaginous, and muscular tissues. (MacPherson.)

The history presented usually is one of gradual physical and mental deterioration. Sometimes, however, the first notice of the disease has been an epileptiform convulsion. Such an occurrence in a person presenting, in any degree, favorable etiological conditions should arouse the gravest suspicion. Or the occasion for seeking medical aid may be an acute maniacal outbreak. In such cases the most careful examination may be insufficient to reveal the real nature of the disease. Even at the hospital they are sometimes at first classified as acute mania, and a favorable prognosis given. A fuller history of the beginning of the illness, such as can more frequently be obtained by the family physician, would probably prevent this error. When insanity of a melancholic or confusional type is present, mistakes are less likely to be made, clearer evidence being usually obtainable on personal examination of the patient. The history obtained by the examiner is, however, usually somewhat indefinite. The patient has probably been noticed to be generally failing in health. He has had digestive disturbances, headache, neuralgia, vague muscular pains, lassitude and disinclination to exertion. His movements are noticed to be more uncertain. If a mechanic, he has lost his dexterity in the use of tools, he cuts himself, he botches his work; if a business or professional man he cannot write so well, he fumbles his knife and fork, he loses his skill at mechanical games. Mentally, there may be a history of change in disposition, habits, and character, with depression of spirits and hypochondriacal notions, or there may be elation and a sense of well-being with expansive ideas. Whatever the

history may be, the examiner, his suspicions once aroused, should seek by means of questioning and by personal examination to elicit the essential physical and mental features of the disease. These are, on the physical side:

1. Progressive incoördination and paresis of all or of portions of the general muscular system. At first, these may be scarcely noticeable. Or, they may appear only when the patient attempts to make finely coördinated movements. Or, they may render the figure slouchy and the gait shuffling and uncertain. Eventually they render the patient bedfast and helpless. A striking feature is relaxation of the muscles of expression, rendering the face smooth, mask-like, expressionless.

2. Tremor.—This is often noticeable very early. It affects principally the lips, tongue and muscles of expression, but eventually is noticeable throughout the voluntary muscular system. The patient should be asked to write and execute other movements requiring steadiness and certainty of movement.

3. Embarrassment of speech is the most prominent physical symptom.—It should always be looked for and when found should be given great importance. To be thoroughly appreciated and readily recognised it must be heard. The first sign of speech disturbance is hesitancy in attempting a more than ordinarily difficult word. The patient pauses, makes a bad attempt at pronunciation, followed possibly by a successful repetition. The friends of the patient may say that he lisps or stumbles in his speech. The examiner may notice the difficulty in pronouncing certain letters, or a tendency to slowness, and the careful, stacatto pronunciation of each syllable. Little may be observable in ordinary conversation, and it is customary to ask the patient to pronounce certain test words. Among these are "communicability," "truly rural," "artillery," "peach tree creek," "Methodist-Episcopal."

4. Pupillary Anomalies.—These are among the most common and significant symptoms of the disease, though they vary in different cases. Inequality of the pupils is most frequently seen, the more dilated pupil being the affected one. The pupils may be markedly contracted and irresponsive to light or accommodation, or they may react to accommodation and not to light. Irregular contour of one or both pupils is not infrequently met with. In the later stages of the disease there is a tendency to dilatation of the pupils.

5. Disturbances of the Reflexes.—The knee-jerk is usually exaggerated, but may be normal. The superficial reflexes are, as a rule, lowered or diminished.

6. Sensory Disorders.—There is usually progressive impairment of cutaneous sensibilities, with a loss of the feeling of pain, and of the thermal sense. Analgesia of the ulnar nerve is considered by some a diagnostic symptom of general paralysis. Tests should be made especially on the chest in front, the lower limb, the upper limb, the face, and hands.

7. Trophic changes.—There is a marked interference with the nutrition of the body. At first there is a tendency to loss of flesh, and the patient looks haggard and fatigued, though later as the dementia deepens he may become quite corpulent. The skin loses its normal texture and color, the nails become rough, fissured, and the hair dry, brittle, and stubborn. Later in the disease more profound trophic changes appear.

8. Epileptiform and Apoplectiform Seizures.—These may occur quite early in the course of the disease, and as indicated may be of great diagnostic importance. They may, on the other hand, be absent until quite late. They are sometimes followed by paralyses which are often transient.

The signs of locomotor ataxia are frequently met with in cases of general paralysis, the two diseases being sometimes associated. In fact, the pathologic process is the same in both instances, the symptoms depending upon the location of the changes in the nervous system.

There is but one invariable mental symptom in the clinical history of general paralysis,—mental weakness. The history related to the examiner may indicate depression of spirits and painful thoughts or, as more frequently happens, mild elation and expansive ideas. There may be positive maniacal excitement with a tendency to destructiveness and violence, or pronounced melancholia with suicidal inclinations. There may be the most extravagant delusions of wealth and grandeur, or of danger of bodily injury or disease. None of these is distinctive, not even delusions of grandeur, which are by many, not practically familiar with the disease, considered essential to the diagnosis. The gay, confident manner and boastful extravagant language of a certain common type of paretic, with the characteristic countenance, and embarrassment of speech, present, indeed, a striking picture which once seen and appreciated can ever after be recognised at a glance. All these, however, may be lacking, especially in the

earlier stages of the disease. The key to diagnosis is the discovery of definite mental weakness in connection with the physical signs. The loss of the sense of propriety and of other finer feelings, of will-power, and of self-control, with consequent predominance of the animal propensities; the failure in business judgment and foresight; the foolish, extravagant, childish conduct; and the lapses of memory which have been noticed by friends and associates are evidences of this weakness.

When the history is indefinite the examiner may himself be able to elicit the required evidence. The conduct and conversation of the patient, while in his presence, may themselves show his poor emotional control, and his incapacity for sustained attention and thought. A few specific questions in regard to remote and recent occurrences with which he ought to be familiar may disclose decided failure in memory, and abnormal indifference and inattention. The simpler these questions, and the more definite the answers required, the better. The hour, day of the week and month, the month and year, the date of birth and marriage, the names of prominent persons and of friends, routes of travel from place to place, the market prices and important newspaper items, are examples of suitable subjects. Simple problems in mental arithmetic may be given to test the patient's computing power, which is almost invariably impaired even quite early in the course of disease. The education, occupation, and station in life of the patient will, of course, have to be considered in estimating the value of the supposed evidences of mental weakness.

Permit me in closing to emphasise the following points: (1) the necessity and importance of recognition, by the family physician, of general paralysis and other forms of mental disease in their early stages; (2) the relation of modern civilisation to the prevalence of general paralysis; (3) the relation of syphilis as a causative factor; (4) that the characteristic of general paralysis is the concomitant appearance of physical and mental symptoms; (5) that the physical signs are definite, characteristic, and, as a rule, easily discoverable; (6) that the essential feature of the mental condition is weakness.

WILLARD, N. Y.

THE severe pain of gout has been promptly relieved by the application of lint saturated with alcohol and covered with oiled silk.—*Canada Lancet.*

Infantile Eclampsia.[1]

By A. J. COLTON, M. D., Buffalo, N. Y.,
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ECLAMPSIA is a term often used synonymously with convulsion. It may be defined as a violent, irregular, paroxysmal contraction of certain muscles,—either tonic or clonic in character, though mostly clonic and accompanied by partial or complete loss of consciousness. The movements may be general or confined to one side of the body; may involve a group of muscles or a large number; or, one form may merge into another. The cause of the convulsions may vary from the most trivial reflex disturbances to a very serious and profound cerebral lesion. In this paper, I shall refer more particularly to those forms of eclampsia in which there is no apparent lesion of the nervous system. I shall, therefore, not consider it as a disease, *per se*, but merely as a symptom of a great variety of morbid conditions, affecting the most diverse portions of the animal economy. But while eclampsia is only a symptom, it is one of so pronounced a character that it merits and, indeed, requires special consideration regarding its points of origin, etiology, nature and treatment.

In the infant the motor neuroses predominate largely over the sensory; hence neuralgia and disturbances of sensation are rare, while all forms of convulsive disorders are exceedingly frequent, especially during the first three years of life. A large proportion of the convulsive disorders of infants, whether local or general, are reflex in their origin, being due to some eccentric irritant acting upon the peculiar impressionable nervous system of the infant. Eclampsia in infants depends upon abnormal conditions of the nervous system, concerning which we know very little. The causes of these abnormal conditions are legion. It may be caused by reflex irritation of whatever nature, proceeding from the central or peripheral nervous system; abnormal conditions of the blood, as found in acute specific and other fevers; in diseases of the kidneys and acute poisoning; autoinfection; ptomaines; by an anemic state of the brain, such as follows severe hemorrhages and profuse diarrhea; by the interference with proper oxygenation and decarbonisation of the blood, as in asphyxia, or by any profound interference with the circulatory or respiratory system.

1. Read before the Buffalo Academy of Medicine, January 13, 1903.

Acute intracranial pressure may cause convulsions by producing a capillary anemia, also, acute cerebral hyperemia may act in a similar manner. Sudden high bodily temperature in itself is a frequent source of convulsions, which I have several times witnessed.

Worms and dentition were once thought to be the most frequent source, and it is probably true that they are occasionally a cause, but there is no doubt that this source has been greatly overdrawn by our forefathers in medicine, as well as the mothers of the present day.

Children in good health cut teeth without the slightest nervous disturbances, and how many of us know of children passing worms without the slightest symptom and observed by the mother only by chance. And, again, what physician has not seen an ill-nourished, rachitic infant, become feverish, cross and irritable; in fact, on the verge of a convulsion and possibly in one, from a tender and swollen gum, and become almost immediately relieved by lancing. This I believe, though, to be an unusual source of eclampsia, and occurs only in those who are rachitic and ill-nourished. Instances of phymosis and adherent prepuce have been known to act as a cause. Age must certainly be considered as an important factor in the etiology of convulsions, it being a well-known fact that children under two years are more frequently attacked than those beyond that age.

Sex is said to have a causing influence, females being more prone to convulsions than males. Heredity may have its effects. A child cannot inherit convulsions but it may inherit such a condition of the nervous system as to predispose to them. Rachitis is generally believed to be a frequent predisposing factor in causing convulsions. Laryngismus, stridulus, tetany, and general convulsions are the common types of eclampsia in this disease. Typhoid and intermittent fevers, pneumonia, whooping cough, toxemia from any cause; malformation and diseases of the heart; irritation of the peripheral nerves, such as burns, stings, bites; also earache, independent of any meningeal trouble, are among causes. Fright and other strong emotions are said to be sources, though I have never observed them.

The various causes heretofore given have been largely of a reflex type, but we may and do have convulsions caused from some gross lesion of the brain or spinal cord, such as the various forms of meningitis, cerebral hemorrhages, emboli and throm-

bosis, anterior poliomyelitis, and the various acute spinal affections, aside from those causes produced by direct injuries to brain and spinal cord. In my experience, by far the most frequent and fertile source of all infantile convulsions is due to some irritating disturbances along the alimentary tract, such as that produced by over and improper feeding. The convulsion may be caused directly from the irritating effect of the indigestible food, or it may be caused indirectly by setting up fermentation and decomposition, causing an intoxication or autoinfection, gastritis, gastroenteritis, enterocolitis, dysentery, diarrhea, cholera infantum and the like, and in fact, most of the various affections of the alimentary tract.

That improper feeding is a frequent cause may be shown by citing a few interesting and typical cases.

Case I.—Baby S., aged 18 months; called to see in great haste and found in a terrific clonic convulsion, involving most of the muscles of the upper and lower extremities and face. Knowing the mother and her mode of caring for and feeding her children, I proceeded at once to empty the intestinal canal by irrigation, which done, brought forth undigested sauerkraut, wieners and other indigestible food products that would have put to blush a free lunch counter. Immediately on its removal the convulsion ceased.

Case II.—Baby R., about 2 years; summoned in great haste and found baby in a general convulsion. I at once proceeded to empty intestinal canal by irrigation and brought forth a quantity of undigested beans and the like. The convulsion immediately ceased on its removal.

Case III.—Baby M., about 2 years; summoned in great haste, but not being at home, another nearby physician was called. I, however, arrived before the child was out of its convulsion and before the other physician had instituted treatment, but just as he was about to give 1-16 gr. morph. subcutaneously. Knowing the patient and parents, I suggested that we try to get at the source of the trouble and recommended irrigation of the bowels, to which he consented, and was immediately done, when, behold, a voluminous discharge of very offensive undigested foods of all kinds and description issued forth. The convulsion at once ceased.

Case IV.—Baby F., about $3\frac{1}{2}$ years; called to see and found in a violent convulsion. I at once began to irrigate bowels and emptied them thoroughly, but child did not come out of the convulsion. I then had cold applications applied to head, hot mustard bath to extremities, and injected about 10 gr. each of triple bromide and chloral per rectum. The convulsion ceased in about half an hour afterward.

In the first two cases convulsions undoubtedly were produced by direct irritation of the indigestible foods; the third was probably due to toxemia set up by the decomposed and fermented foods; the fourth proved to be due to a tubercular meningitis. The pathology I will leave with my hearers to read for themselves.

Symptoms of an oncoming convulsion.—The child sleeps with its eyes half open, showing the white sclera beneath the upturned cornea, becomes restless, starts and cries out in its sleep, grits its teeth, twitches its mouth and occasionally a smile (*risis sardonicus*) passes across its face. There may also be a tendency to flexion of the thumbs in the palms. It gazes into vacancy, usually to one side and upward with an expressionless face. The pupils change frequently and are usually widely dilated.

Treatment.—When a physician is called in to see an infant in convulsions, he has no time to spare in getting history of the case. The infant is in imminent danger of asphyxia from paralysis or spasm of respiratory muscles or glottis; hence, what he does must be done quickly. As at least a very large percentage of all infantile convulsions is due to improper and overfeeding, I attempt to at once empty the intestinal tract as soon as possible. To wait for a dose of calomel or castor oil to act is out of the question, for the infant could die a score of times before cathartics would have time to act; furthermore, the infant is unable to swallow.

If I find the infant in imminent danger of asphyxia, I administer a small amount of chloroform to relieve spasm, and have cloths rung out of warm mustard water applied to extremities, while an enema of soap suds and water, with a few drops of turpentine, is being prepared. If a fountain syringe is present I use that—first gently stretching the sphincter so that the enema will be easily returned and avoid danger of over-distending the bowel. I then proceed to irrigate until the offender has come away. If the spasm is caused from fermented or undigested foods, it will come out of the convulsion almost as quickly as the offending material is detruded. Should the spasm not cease after thorough evacuation of bowels, I inject into the rectum with a small piston syringe, which I always carry in my medicine case, a solution of triple bromides and chloral, about 10 gr. of each, for an infant of 2 years. In addition to this, the child is put in a warm bath and ice bag to its head, if the infant has a high fever. Should not the convulsion, which you are treating, be

caused from offending material in the intestinal canal, you have done no harm by irrigating, for should it be caused from an oncoming fever, producing the convulsion either from high temperature or a toxic state of the blood, you have helped to reduce the fever; caused a depletion of the intestinal capillaries and thereby throwing off more or less toxic material; or, if due to cerebral hyperemia or meningitis, you have done good by producing a revulsive action, drawing the blood from a congested brain, which is the usual condition during convulsions. If you see the infant before it has a convulsion, but in imminent danger of one, emetic doses of ipecac or turperth mineral is admirable treatment in connection with irrigation. If you think the drug will not have time to act before an eclamptic seizure, tickle the fauces with the finger until emesis is produced. If the nerous disturbances and fever are caused from some indigestible food in the stomach, the fever will soon subside and the nervous symptoms disappear, if there has not been produced too great a congestion or toxemia; then nerve sedatives and mild antiseptics will be required.

After the infant is out of the convulsion, then get a history of the case and study the cause. If you are still convinced that it was due to an intestinal toxemia or from indigestible and decomposed food, administer a cathartic, such as a dose of calomel or castor oil, followed by stomachic and nerve sedative, such as salol, and bismuth and triple bromides. All solid foods should be withheld for twenty-four hours, giving pure cold water, such as crystal water, albumin water, rice or barley water, or freshly prepared sterile whey made with pepsin. The infant should be kept in a darkened room and absolutely quiet.

If you find that the eclampsia has been due to a tender and swollen gum, lance it; if to an adherent prepuce, break up adhesions and wash away the smegma; if due to a long and tight foreskin, circumcise; or, if due to rachitis, correct the diet, give bone salts, cod liver oil, massage and strict observance of its hygiene; if worms are found, get rid of them; or, in other words, search for the cause and then endeavor to correct it.

To summarise, when called to see an infant in convulsions, if you are in doubt as to the cause, irrigate the bowels at once, at the same time applying counter irritation to extremities, such as cloths wrung out of hot mustard water and ice to the head; if indicated by a high temperature, a general warm bath may be given at the time of irrigation. Should the convulsion be not

due to indigestible or fermented food, no harm has been done by irrigating the bowels, and in many instances a human life will have been saved.

25 East Ferry Street.

SPECIAL ARTICLE.

On the Evidence of Nuclear Division of Certain Cell Inclusions (Thoma, Sjöbring, Plimmer's Bodies) in Cancerous Epithelium.

From the Cancer Laboratory of the New York State Department of Health, University of Buffalo.

By HARVEY R. GAYLORD, M. D., Director.

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SINCE the advent of cellular pathology the attention of investigators has been directed to certain bodies embedded in the cytoplasm of the cells of malignant tumors. The difficulty of determining the nature of these inclusions is well evidenced by the extensive literature pertaining to the subject, but which even today leaves the significance of at least a number of these structures in doubt.

The bodies with which we wish to deal in this paper are spherical or slightly oval structures from .004 to .01 mm. in size,

or in exceptional cases of still greater dimensions. They invariably contain a small body usually centrally placed. With the exception of this central body the resting inclusions present an appearance not unlike that of a vacuole, as no structure other than the central body is demonstrable. The entire structure is embedded in the protoplasm of the cancer cells and, where the body is of greater dimension, the cell nucleus is commonly pushed to one side and curved about it. The staining reaction of these inclusions is dependent largely upon the fixative employed. In material hardened with formalin and stained with Delafield's or iron hematoxylin, the central bodies of a certain number of the inclusions take the nuclear stain. Where osmic acid is used as a fixative, in which case the inclusions are most definitely demonstrated, the central body of the inclusions stains as does the protoplasm. These bodies may be found unstained in fresh material directly after removal of the tumor.

Although, as will be seen from the historical review, these bodies have been repeatedly observed and in many cases accurately illustrated, they have in recent times through the exhaustive article of Plimmer attracted renewed interest. In several of the recent publications on the subject, the bodies have been spoken of as "Plimmer's bodies." Von Leyden, one of the most recent writers on the subject, has called attention to their similarity in appearance to the eye of a bird, for which reason they are coming more and more to be spoken of as "bird's-eye inclusions," a not inapt expression.

Historical.—On review of the literature it becomes evident that many observers have seen and illustrated the inclusions above described. As early as 1847, in the first volume of Virchow's Archiv. is found an article by Virchow, entitled, "Zur Entwickelungsgeschichte des Krebses, nebst Bemerkungen über Fettbildung im thierischen Körper und pathologische Resorption," in which on Plate II., Fig. 5, the cells shown at *a*, *g*, *i*, *l*, *n*, and *k*, undoubtedly contain inclusions of this nature. It is interesting to note that the author represents cells in the fresh state. Virchow interpreted these bodies as modifications of the nuclei of the cancer cells.[1]

1. The cell inclusions described by Langhans in *Deutsche Chirurgie von Billroth und Lücke*, 1886, in the epithelial cells of carcinoma of the glands of Kupfer, do not belong under this heading, although Lubarsch (*Pathologische Anatomie und Krebsforschung*) wishes so to classify them. The bodies described and illustrated by Langhans are round, well-defined bodies, from the size of a nucleus to that of a large vacuole. They were, however, filled with granular material and surrounded by deeply stained membranes. Many of them were drawn out in tubular or branching form. It will be seen that this description in no way conforms to that of the bird's-eye inclusion.

In Vol. III. of Virchow's Archiv. (Die endogene Zellenbildung beim Krebs) Virchow further describes cell inclusions of which those illustrated on Plate II., Figs. *2c*, *4a*, *2* and *d* appear to represent bird's-eye inclusions, although the illustrations are not sufficiently characteristic to remove a possible doubt. (See Fig. 1.)

Fig. 1.

Plate II., Fig. *4d*, after Virchow.

Soudakewitsch[1] in two articles published in 1892, gives repeated illustrations of these bodies. Plate V., Fig. 6, carcinoma of breast, represents a body apparently undergoing division with four central bodies arranged in the form of a cross. Fig. 2, Plate VI., also carcinoma of the breast, shows multiple inclusions, the one above and to the right presenting a definite phase of division. (See Fig. 2.) Fig. 27, Plate VI., carcinoma of the breast, hardened in Fleming and stained with safranin, represents a resting body. Plate VII., Fig. 17, carcinoma of the pancreas, hardened with osmic acid and stained with hematoxylin, represents a rosette form. Fig. 19 represents a cell with multiple inclusions from the metastases of cancer of the pancreas. In a second article in August of the same year he describes further inclusions. That of Fig. 7, Plate XII., from a primary case of carcinoma of the pancreas, illustrates seven definite inclusions, with central bodies forming a rosette. (See Fig. 2.) Fig. 15, from a primary carcinoma of the liver, stained with osmic acid and hematoxylin, represents a group of these bodies, and in Fig. 17,

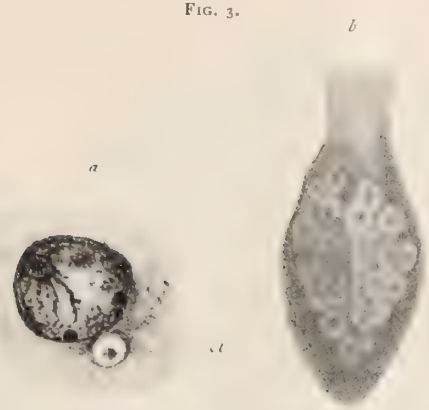
Fig. 2.

a Plate XII., Fig. 17, after Soudakewitsch.
b " VI., " 2, " "
c " XII., " 7, " "

1. Soudakewitsch. -Recherches sur le parasitisme intracellulaire, etc. *Annales de l' Institut Pasteur*, 1892, March 25, No. 3.

a body undergoing division is represented from a carcinoma of the pancreas. (See Fig. 2.) Fig. 21 again represents a group of similar inclusions from a case of cancer of the liver.

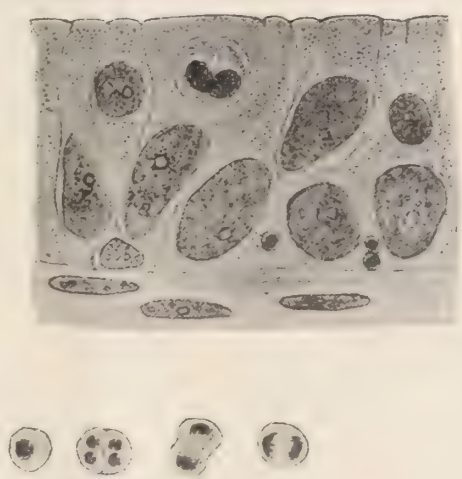
Fig. 3.



a Plate IV., Fig. 1, after Sjöbring.
b " IV., " 14, " "

Sjöbring[1] gives a most accurate and consistent description of bird's-eye forms of inclusions. In Figs. 1, 12 and 14 he illustrates characteristic forms. (See Fig. 3.) Thoma[2] describes bodies somewhat similar to those of Sjöbring. His original article is unaccompanied by illustrations. Illustrations given in his Lehrbuch f. path. Anatomie, 1894, p. 169, leaves some doubt as to the identity. Fig. *a* apparently represents a bird's-eye inclusion, and those shown in the large figure above likewise appear to be of this nature. Figs. *c* and *d* of this illustration, representing a form of division, do not coincide with any forms we have personally observed. (See Fig. 4.)

Fig. 4.



a Adenocarcinoma of the rectum—Thoma.
b Parasitic forms from above.

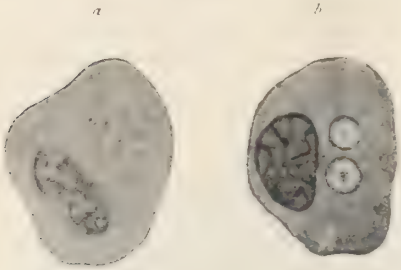
1 Sjöbring.—Ein parasitäre Protozoartiger Organismus in Carcinomen. *Fortschritte d. Medecin*, 1890, p. 529.

2. Thoma.—Ueber eigenartige parasitäre Organismen in den Epithelzellen der Carcinome. *Fortschritte der Medecin*, 188), p. 413.

An investigator who undoubtedly observed these bodies was P. Foa.[1] (See Fig. 5.) In Figs. 2 and 16 of Plate II. and 13 of Plate III., this author illustrates these bodies from carcinoma of the breast. He also recognises the identity of many of the bodies described by him and those of Soudakewitsch, just mentioned.

Kürsteiner[2] describes two cases of carcinoma, one villous carcinoma of the bladder and the other papillary adenocarcinoma of the uterine mucosa, in which he found embedded in the cells spherical and oval bodies with well-defined central structures staining with eosin. His illustrations are all taken from a villous carcinoma of the bladder and leave no doubt that in Figs. 3, 4, 5, 6, 7 and 8, Plate XII. he was dealing with typical bird's-eye inclusions. (See Fig. 6.) Of interest are the large number of inclusions which Kürsteiner noted in certain cells of his preparations. In one cell he was able to count as many as *eighty inclusions*. He inclines to the belief that the inclusions may be parasites, but expresses himself with great caution.

FIG. 5.



a Plate II., Fig. 2, after Foa.
b " II., " 16, " "

Seegenbeck van Heukelom,[3] in an address before the 10th National Medical Congress in Berlin, 1890, describes the presence in carcinoma, including nearly every type, covering some 200 different cases, of large and small spherical inclusions in carcinoma cells. These sometimes presented a double contour, appeared to be filled with protoplasm and presented a nuclear-like structure, which stained with carmine. Besides these so-called larger spheres he describes smaller ones, which he says were found embedded in the protoplasm and in the nuclei. They did not stain with carmine, and but weakly with eosin. They were not very refractive. From his description of the larger bodies, it is certain that they corresponded with those of Wickham, and of

1. Foa.—Ueber den Krebsparasiten. *Cent. f. Bakteriologie*, Vol. XII., p. 185, 1892.

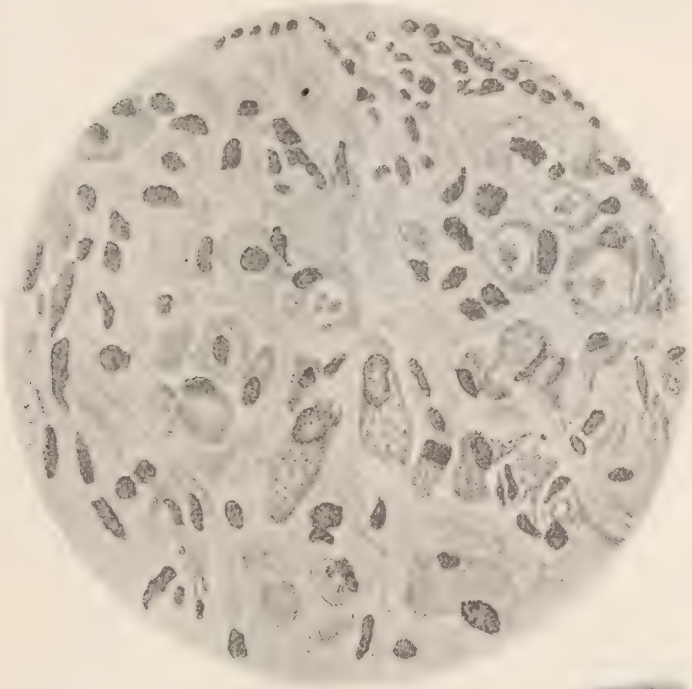
2. Kürsteiner.—Beiträge zur pathol. Anatomie der Papillome und papillomatösen Krebse von Harnblase und Uterus. *Virchow's Archiv.*, Vol. CXXX., p. 463.

3. Seegenbeck van Heukelom.—*Centralblatt f. allg. Pathologie und pathologische Anatomie.* Vol. I., p. 204.

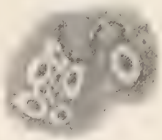
the smaller it is difficult to say whether they represent the typi-

FIG. 6.

a



a Plate XII., Fig. 3, after Kürsteiner.
b " XII., " 6, " "



cal bird's-eye inclusions or not. The description is, unfortunately unaccompanied by illustrations.

FIG. 7.

Plate VII., Fig. 2, after Podwyssozki and Sawtschenko.

The description given by Podwyssozki and Sawtschenko[1] varies somewhat from the description of other authors but some of the inclusions illustrated by them present the characteristics of the typical bird's-eye form. Fig. 2, Plate VII.; Fig. 20, Plate VIII., inclusion to the left, are characteristic. (See Fig. 7.) The technique employed by these authors was somewhat different from that of others, although based on osmic acid fixation, the stain being safranin and picric acid.

1. Podwyssozki and Sawtschenko.—*Centralblatt f. Bakteriologie*, Vol. XI., No. 16, 1892, p. 493.

After a most careful review of the forms of inclusions previously described in carcinoma, Borrel[1] concludes that the only bodies which under any circumstances could be considered as parasitic are the typical bird's-eye inclusions. In Figs. 8 and 9, Plate II., Borrel illustrates two large epithelial cells from epithelioma of the maxillary region, containing typical bird's-eye inclusions. (See Fig. 8.) Fig. 9 of this plate likewise shows forms suggestive of nuclear division, to be considered later.

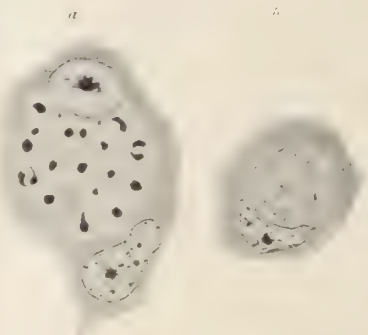
FIG. 8.

Plate II., Fig. 9, after Borrel.

Sawtschenko[2] describes as appearing in several tumors, the origin and number not being given, cell inclusions of the bird's-eye type. Those shown in Figs. 7, 8, 9, 10 and 11 are entirely characteristic. (See Fig. 9.) His preparations were from material hardened in Flemming's solution, stained with safranin.

Ruffer and Walker[3] illustrate these inclusions in Plate XIV., Figs. 4 and 8, from two cases of gastric carcinoma; Plate XVI., Fig. 10, from carcinoma of the breast; Figs. 20, 21, 25, 28, 29, hardened with Flemming and stained with methyl-green, Biondi, also from cancer of the breast.

FIG. 9.



a Plate I., Fig. 10, after Sawtschenko.
b " I., " 9, "

Ruffer and Plimmer[4] in Figs. 2, 5, 6, 12, 18, 32, 35, 37 and 49 of Plates I., II., and III., give excellent illustrations of typical inclusions. (See Fig. 10.)

1. Borrel.—Evolution cellulaire et parasitisme dans l'epithelioma. *Montpellier*, 1892, 40. *These.*

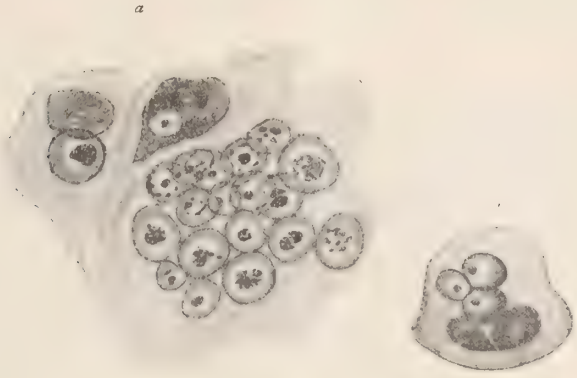
2. Sawtschenko.—Ueber schmarotzende Sporozoen in Krebsgeschwülste. *Centralblatt f. Bakteriologie*, Vol. XII., 1892, p. 17.

3. Ruffer and Walker.—On some parasitic protozoa found in cancerous tumors. *Journal of Pathology and Bacteriology*, 1893, p. 198.

4. Ruffer and Plimmer.—Further researches on the parasitic protozoa found in cancerous tumors. *Journal of Pathology and Bacteriology*, 1894, p. 3.

J. Jackson Clarke[1], illustrates on Plate III., Fig. 6, a group of typical bird's-eye inclusions, and at 7 and 10, masses of what

FIG. 10.

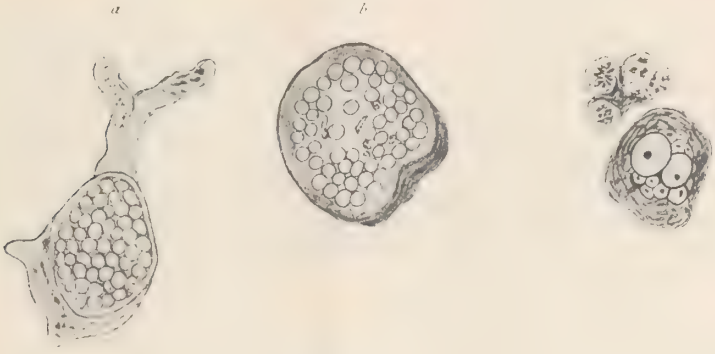


a Plate I., Fig. 5, after Ruffner and Plimmer.
b Plate XXIII., Fig. 11, after Ruffner and Plimmer.

appear to be spore-like bodies of a similar nature. (See Fig. 11.) He considers these inclusions to be sporozoa.

C. H. Cattle[2] describes typical bird's-eye inclusions and

FIG. 11.



a Plate III., Fig. 10, after J. Jackson Clarke.
b " III., " 7, " " "
c " III., " 6, " " "

especially calls attention to the fact that the inclusions can be found in the acini of the mammary gland at the margin of cancer of the breast, at the points where the epithelium of the acini

1. J. Jackson Clarke.—Observations on the Histology of cancer. *Centralblatt f. Bakteriologie*, Vol. XVI., 1894, p. 281.

2. Cattle, C. H.—Observations on the Histology of Carcinoma and the Parasite-like Bodies found in them. *Journal of Pathology and Bacteriology*, Vol. II., p. 367, 1894.

is undergoing cancerous transformation. This is probably the first definite reference to the presence of bird's-eye inclusions in the epithelium of the acini, where the epithelium still maintains its typical acinous arrangement. (See Fig. 12.)

Fig. 12.

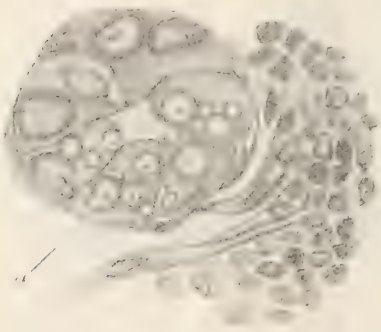


Plate XXII., Fig. 9, after Cattle.

Sawtschenko[1] again describes, under a number of cell inclusions of varying forms, certain that represent typical bird's-eye inclusions. Fig. 30, PlateVI. (see Fig. 13), carcinoma of the breast and 32 from the same; Plate V., Fig. 24, the lower figure, from carcinoma ventriculi, and 25, upper figure, carcinoma of the breast, are clearly defined bird's-eye inclusions.

Pianese[2] shows in Fig. 2, Plate IV. (see Fig. 14), in one of the cells to the left, well-defined bird's-eye inclusions from carcinoma of the breast.

F. J. Bosc[3] shows in Plate I., Figs. 1, 2, 3, 4, 5, 6, 7, 10, 11 and 38*b*, well-defined bird's-eye inclusions. On Plate II., Fig. 1 (see Fig. 15), are many inclusions of this type. Fig. 2*m*, Fig. 3*x*, Fig. 4*m*, Fig. 1*a*, Fig. 2*m*, Fig. 5*m*, 14, 15, 17 and 18 are from a case of carcinoma of the pancreas and liver. Plate IV., Figs. 26 and 28, epithelioma of the lower lip. On Plate II., Fig. 4 at "mor"; Plate III, Figs. 14, 15, 16, 18 and 19; Plate IV., Fig. 28; Plate V., Fig. 8 at "mor"; Fig. 12 at "mor"; Plate VII., Fig. 2*b* and Plate X., Fig. 4, the author pictures closely arranged groups

Fig. 13

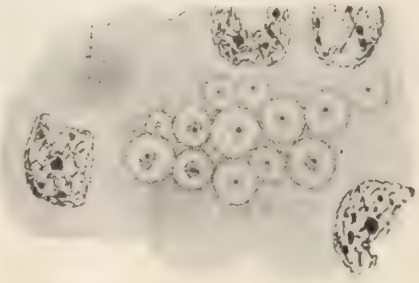


Plate VI., Fig. 30, after Sawtschenko.

1. Sawtschenko.—Sporozoen in Geschwülste. *Bibliotheka Medica*, DII., Part 4, 1895.

2. Pianese. Beitrag zur Histologie und Aetiologie des Carcinoms. *Ziegler's Beiträge*, 1896, Suppl. 1.

3. Bosc, F. J.—*A Monograph on Cancer*, Paris, 1898.

of these bodies, which he considers to represent spore formation.

H. G. Plimmer[1] in his most recent article states having found these bodies in a large number of cancers, and gives illustrations from a cancer of the breast which contained unusual numbers. The figures on Plate I. (see Fig. 16), Figs. 7, 8, 9, 10 of Plate II. illustrate these inclusions.

Fig. 14

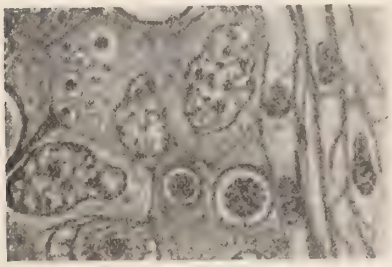


Plate IV., Fig. 2, after Pianese.

Sjöbring[2] in his most recent publication, illustrates typical cell inclusions of especial interest. These are illustrated as apearing (see Fig. 17) in the epithelial cells of the epididymis of a rabbit, from the immediate neighborhood of a fragment of carcinoma which had been transplanted under sterile conditions into the tunica vaginalis of the animal.

E. von Leyden,[3] in Plate I., illustrates inclusions from a carcinomatous lymph node from carcinoma of mamma and a carcinoma of the cecum. He suggested the term "bird's-eye inclusion" which aptly describes the appearance of these structures.

Fig. 15.

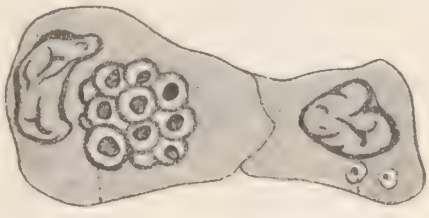


Plate II., Fig. 4, after Bosc.

Gaylord[4] illustrates these bodies in Plates VIII., IX., XIV. and Figs. 2 and 3, Plate XV.; Figs. 1, 2, 3, and 4, Plate XVI., all taken from carcinoma of the breast.

Feinberg[5] describes characteristic bird's-eye inclusions embedded in the protoplasm of cancer cells, as well as a form

1. Plimmer, H. G.—On the Histology and Etiology of Cancer. The *Practitioner*, April, 899.
2. Sjöbring, N.—Ueber die Microörganismen in den Geschwülsten. *Centralblatt f. Bakteriologie*, Vol. XXVII., 1900.
3. Von Leyden, E.—Zur Aetiologie des Carcinoms. *Zeitschrift für klin. Medecin*, Berlin, 1901.
4. Gaylord, H. R.—The Protozoön of Cancer. *American Journal of the Medical Sciences*, May, 1901.
5. Feinberg.—Zur Lehre des Gewebes und der Ursache der Krebsgeschwülste. *Deutsche med. Wochenschrift*, XXVIII., 11, p. 185, 1902.

which he believes to be extra-cellular, which appears to be without a central body. His article is unaccompanied by illustrations

Fig. 16.

a Plate I., Fig. 5, after Plimmer.
b " I., " 6, " "
c " II., " 9-10, " "

but from examination of his specimens there is no doubt Feinberg in part deals with the typical inclusions.

Greenough[1] illustrates on Plate XXXIII., Figs. 2 and 3, what appear to be typical bird's-eye inclusions. Plate XXXV., Fig. 3, appears to contain a typical inclusion. Those shown on Plate XXXIII. were from a cyst adenoma of the breast. Fig. 3, Plate XXXV., is from carcinoma of the breast.

Fig. 17.

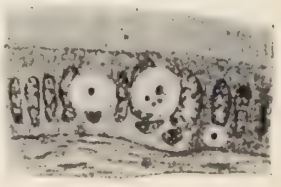


Fig. 1, after Sjöbring.

Nösske[2] illustrates on Figs. 1, 2, 3, 4*c* and 10, typical bird's eye inclusions.

E. von Leyden[3] illustrates on Plate I. (see Fig. 18) cells containing these inclusions from a case of pulmonary carcinoma and cancer of the breast. In Fig.

1. Greenough.—Cell Inclusions in Cancer. *Journal of Medical Research*, Vol. VII., No. 2.
2. Nösske.—Untersuchungen über die als Parasiten gedeuteten Zelleinschlüsse im Carcinom. *Deutsche Zeitschrift für Chirurgie*, Bd. LXIV.
3. Von Leyden, E.—*Ueber die Parasiten des Krebses*, 1902.

4*a* and *d* he shows a cell containing large masses of these inclusions, which he thinks are the termination of a process of spore formation. Figs. 3*a* and 3*b* show the same accumulation of closely packed smaller bodies in another cell. Several of his illustrations represent the bodies in the fresh state stained and unstained.

Fig. 18.

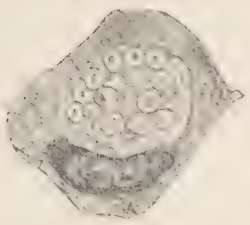


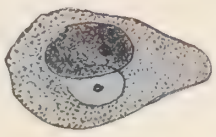
Plate I, Fig. 4*a*, after von Leyden

Posner[1] has recently published five drawings made by himself in 1876 while a student of Wagner's. (See Fig. 19.) These represent characteristic bird's-eye inclusions from carcinoma of the breast and one illustration of characteristic bird's-eye inclusions in a sarcoma cell from sarcoma of the spinal cord. This is the first recorded observation of bird's-eye inclusions in sarcoma.

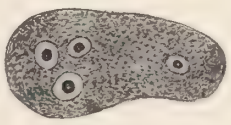
Klimenko,[2] in an article reviewing a previous article of Feinberg, describes bird's-eye inclusions which he thinks, however, are not identical with those described by Feinberg. He was unable to find an inclusion corresponding exactly to those given by Feinberg. He has attempted to determine by microchemic reactions whether the bird's-eye inclusions are the result of degenerative processes, and concludes that they give no microchemical results indicating that they are. He agrees with Nösske that the inclusions are probably the result of secretive and excretive activity, or perhaps even evidence of reserve food stuff (glycogen) in the cells. He observed the fact that in certain cases of carcinoma of the breast, where there was great metotic activity in the cells, but few inclusions were present. On the other hand, in certain carcinomata, in which proliferation was not markedly active, a large number of inclusions could be found. He was unable to determine a direct relation between

Fig. 19.

a



b



a Fig. 3, after Posner.
b " 5, " "

1. Posner.—Notiz über vogelaugenänliche Einschlüsse in Geschwülstzellen. *Archiv. für klin. Chirurgie*, Bd. LXVIII., Heft 3.

2. Klimenko.—Eine Nachprüfung der Arbeit Dr. Feinberg's über seine Krebsparasiten Beitrag zur Frage über die Einschlüsse in und zwischen den Krebszellen. *Centralblatt für Pathologie*, Vol. XIII., No. 21, p. 837.

the presence of inclusions and metotic activity in the neighboring cells. He was never able to detect inclusions in cells undergoing division.

The theories advanced as to the significance of these bodies: (*a*) as degenerations of various kinds of the cytoplasm and nuclei of the cells. Of the authors already cited those who have undoubtedly observed and illustrated the inclusions which we are considering, Virchow, Pianese, Greenough and Nösske, interpreted them as the result of transformation or degenerations of the component part of the cells. Virchow in his first article interpreted these bodies as metamorphosed nuclei. In his second article he advanced the theory of endogenous cell formation and believed that the inclusions illustrated were cells thus formed. Borrel[1], who previously held that these bodies were of a parasitic nature, has recently suggested that they are produced by alterations in the centrosomes of the cancer cells. Pianese's article deals with a great variety of inclusions and only those quoted, Fig. 2, Plate IV., can be accepted as sufficiently characteristic to be included under the type we are considering. Pianese's investigations led him to the conclusion that all the structures illustrated were the result of different forms of metamorphosis, vacuolisation of the protoplasm, and hyaline and colloid degeneration. It would appear from the recent publication of Pianese that he has somewhat modified his interpretation of at least certain varieties of the inclusions described in his extensive monograph. In his most recent[2] article, which deals with a protozoon infecting the renal epithelium of the guinea pig, Pianese concludes that the presence of this organism leads to the development of active mitotic changes of the adjacent epithelial cells. These figures are either typical or atypical, and the latter closely resemble the forms of mitosis found in carcinoma. He likewise finds that the epithelium presents other characteristics (karyolysis, karyorrhexis, nucleorrhexis and nucleolysis) uniformly observed in cancer cells. Lastly, he finds that many of the epithelial cells contain inclusions closely resembling certain varieties found in carcinoma. He was unable to satisfy himself as to whether these inclusions were stages in the development of the parasite or changes produced in the cell by the indirect action of the organism. It

1. Borrel.—Les Theories parasitaires du cancer. *Ann. de l'Institut Pasteur*, Vol. XV., 1901.

2. Pianese.—Ueber ein Protozoon des Meerschweinchens. *Zeitschr. f. Hygiene und Infectionskrankheiten*, Vol. XXXVI., Part 3.

would appear from this article that Pianese does not at present hold fast to the conclusion, that all the cell inclusions in cancer are the result of degeneration of the cells.

Greenough concludes these bodies are the result of secretory activity of the cell. He bases his conclusions on the facts that the inclusions are not found in epithelioma or sarcoma, and that they are found in non-cancerous diseases of the mammary gland, *i. e.*, fibroadenoma. Nösske arrives at a conclusion similar to that of Greenough, believing the inclusions to be the result of secretory activity on the part of the cells. Borrel[1] interprets many of the cell inclusions as centrosomes.

Besides these authors a number of critical articles have appeared. Lubarsch[2] believes that the inclusions may be one of the four following: First, they may be the result of vacuolisation of the cell protoplasm in which protoplasmic remains become condensed and form a central body. Second, they may be centrosomes (Borrel), numbers of which have been found in giant cells by Heidenhain and Benda. Third, the bodies are the result of the phagocytic activity of the cancer cells which take up red blood corpuscles, these disintegrate, the remains forming the central body. Fourth, the bodies are caused by secretion granula around which a halo of pale protoplasm is formed. To these four may be added two more. Fifth, the belief that they are the result of special secretory activity on the part of the cells (Greenough, Nösske); and, sixth, Hansemann[3] believes that these bodies are formed as a result of the fixative which extracts the water from hyaline material embedded in the protoplasm. As a result of this extraction of water the hyaline material remains as a condensed central mass which forms the central body.

It will be seen from the above enumeration, that investigators who have interpreted these so characteristic inclusions as the result of metamorphosis of the cytoplasm, are in no way agreed as to the manner in which they are formed. Those who hold that the bodies are probably parasitic in their nature, have advanced certain arguments in objection to the above interpretation.

First of all, all investigators who have interpreted the bodies as parasites have failed to find characteristic inclusions in any

1. Loc. cit.
2. Lubarsch.—*Pathologische Anatomie und Krebsforschung*, 1902.
3. Hansemann.—Die mikroskopische Diagnose der bösartigen Geschwülste. Second Ed., 1902, Berlin.

other structures than tumors. It is claimed that in properly fixed sections the bodies present a characteristic appearance, and can be distinguished from simple vacuolisation of protoplasm. The most recent utterance on this subject is that of Benda.[1] He states that although he has searched carefully for these inclusions in all kinds of tissue he has failed to find them in anything but malignant growths. It must appear, then, that if the bodies are the result of vacuolisation of protoplasm, this form of degeneration is characteristic of carcinoma cells. An apparent exception to this statement is that contained in the publication of Nösske. This author claims to have found typical bird's-eye inclusions in the epithelium of the normal acini of the breast. An analysis of this statement shows first, that the normal breast referred to was located at the margin of a nodule of carcinoma. Through the courtesy of Prof. Marchand, the writer has had the privilege of seeing this section. After carefully viewing the preparation it appeared to us that the epithelium in question had already begun to proliferate. In one portion of the acinus, there were three distinct layers of the epithelium. We were of the opinion in this case that the epithelium had already undergone cancerous metamorphosis. Dr. Nösske exhibited this preparation at the 31st Surgical Congress in Berlin, April 3, 1902. It was viewed by a number of pathologists, a majority of whom were likewise of the opinion that the epithelium had already undergone carcinomatous transformation. The presence of the inclusions, therefore, at the margin of carcinoma nodules would rather more strongly indicate that they were of parasitic nature than that they were degenerations. The observation is not new, the distribution of the inclusions in the acini at the margin of carcinoma of the breast, having been referred to and accurately described by Cattle.

The bodies illustrated by Greenough found in fibroadenoma of the breast are undoubtedly characteristic bird's-eye inclusions, but inasmuch as fibroadenomata are known in many cases to become transformed into cancer, and as the etiology of this form of tissue development is unknown, their appearance in this class of tumor in no way excludes the possibility of their being parasites. The inclusions shown by Nösske, as appearing in the bronchial epithelium in a case of congenital syphilitic pneumonia in a new-born child, are so essentially different from the

1. Benda.—Sitzung der Karzinom Comite, Oct. 4, 1902.

bird's-eye inclusions as to be excluded, even from the illustrations which accompany his article.

As to the second possibility that the bodies are centrosomes, as noted by Benda and Heidenhain (Borrel and LeCount[1]), this supposition is rendered improbable by the great number occasionally found in a single cell. Kürsteiner counted as many as 80 in one cell, and Plimmer[2] illustrates a cell containing 27 inclusions. (See plate Fig. 2.) Accompanying this article illustrates a cell in which 18 cell inclusions can be counted. Secondly, the fact that centrosomes can be found in cells containing these inclusions and can be definitely distinguished from them should dispose of this interpretation of the body.

In this connection, the evidence of Benda (*Verhandlungen der deutschen Gesellschaft für Chirurgie*, 31st Surgical Congress, Berlin, April 3, 1903, p. 73,) is of great importance. One of the first to describe centrosomes, and quoted by Lubarsch as an authority, he states first that centrosomes have often been sought for in carcinoma cells without their presenting any pathological alterations. He states that he has recently, with new and specially proved methods, investigated this question, and holds that the *theory of Borrel is incorrect*, in that he has repeatedly found the centrosomes intact in cells which contained numbers of the bird's-eye inclusions. He holds that the hope of explaining the abnormal proliferation of carcinoma cells as the result of alterations of the centrosome is fruitless.

Third, the interpretation of these bodies as disintegrating red blood cells taken up by the epithelium (Lubarsch) has been advanced by various observers. This criticism has likewise been applied to preparations of our own in which we had injected plasmodiophora spores into the tissue of warm-blooded animals, in repeating the experiments of Podwyssozki[3] where plasmodiophora spores were taken up by the phagocytic connective tissue cells of the animal and presented an appearance, in many cases, indistinguishable from the bird's-eye inclusions in carcinoma. In attempting to definitely exclude the red blood cells as a factor in the production of these forms, which we held to be metamorphosed spores, we examined a number of specimens taken from nodules developing on the peritoneal surface of frogs which had been inoculated in the same way. These

1. *Journal of Med. Research.*

2. Loc. cit.

3. Podwyssozki.—Myxomyceten, resp. Plasmodiophora Brassicæ Woron. als Erzeuger der Geschwülste bei Tieren. *Centralblatt für Bakteriologie*, Vol. XXVII., p. 97.

nodules were composed of endothelial cells (as described by Podwyssozki) containing the spores of plasmodiophora brassicæ, many of which again presented an appearance identical with the cell inclusions in carcinoma, and identical with the spores embedded in the connective tissue phagocytes surrounding the fragments of implanted clubroot in warm-blooded animals. (See Plate, Fig. 2.)

The results of these two lines of experimentation were exactly the same, but the great difference in the red blood corpuscles of the warm-blooded and cold-blooded animals, in the first case non-nucleated, in the second case much larger and nucleated, left no doubt that the inclusions in both cases were the metamorphosed spores of plasmodiophora brassicæ. In neither series of experiments were we able to determine that the phagocytes had taken up red blood cells, although in other pathological conditions, *i.e.*, typhoid fever, it is a recognised fact that phagocytic cells commonly take up the erythrocytes. The difficulty of determining the origin of inclusions in cells without the aid of experimentation is emphasised in this case. Many of these bodies are larger than red blood corpuscles, and in properly prepared specimens we have never been able to find any ground for holding that they were altered erythrocytes. The fact that in many cases the central bodies of the bird's-eye inclusions can be stained with a nuclear stain, likewise speaks against this supposition.

Fourth and fifth, that the bodies are not secretion granula or the result of special secretory activity on the part of the cell is more difficult to prove, but the fact that they have occasionally been found (Posner) in sarcomata renders either explanation rather improbable. The statement of Nösske that they are only found in glandular epithelium and almost exclusively in the mammary gland, a view which Greenough holds, and to which we were previously inclined ourselves, is shown to be incorrect by a critical review of the literature of the earlier writers. This shows that undoubted bird's-eye inclusions have been found in carcinoma arising from other types of epithelium.

Sixth, that the characteristic appearance of these bodies is not due to any action of the hardening process (Hansemann) is shown by their *constant appearance in fresh material, where they have later been found in hardened and stained sections.*

As parasites.—With the exception of the authors above mentioned, the remainder of those who have accurately described or illustrated these inclusions have interpreted them as parasites.

The earlier investigators compared them to recognised types of protozoa, notably the coccidia and the gregarinæ. Many of these authors describe, besides the forms which we are considering, larger and more complex structures presenting appearances not unlike certain forms in the development of these organisms. The younger forms of coccidium perforans (Leuch) (coccidium oviforme), in the epithelium of the intestinal tract of rabbits is extremely like in appearance the bird's-eye inclusions of cancer.[1] The readiness with which ectogenous forms of coccidia can be detected in the tissues of the animals infected, has, however, weakened the force of this comparison, because of the absence in the fresh material of cancer of forms presenting anything like the definite characteristics of the ectogenous cycle of the coccidia. A class of organisms which has attracted the attention of the more recent writers on the subject is the mycetozoa, especially one of the group, plasmodiophora brassicæ, an organism which causes tumors and outgrowths in plants. This class was previously placed among the lower types of fungi, but more recently has been accepted as a variety of protozoa. Doflein, in his recent book on the subject classifying it under the rhizopoda.

The first to call attention to a possible connection between cancer and kohlhernia was R. Behla. He noted the prevalence of this disease in plants in localities in which cancer was prevalent. He inoculated animals with fragments of the plant tumors and noted that granulation tumors resulted. He did not, however, detect the presence of the parasite in the tissue cells. Podwyssozki[2] after viewing the preparations of Nawaschin in a preliminary announcement, called attention to the fact that certain forms of this organism and certain inclusions in cancer presented great points of similarity. He afterward reported experiments upon rabbits, guineapigs, frogs and axolotls, in which he had succeeded in producing infection and had detected the presence of the spores in the cells of the infected animal. He found that the introduction of the spores of plasmodiophora in the tissues of both cold and warm-blooded animals, led to the development of tumors of considerable size made up of cells derived, either from the connective tissue, or from the endothelium of the surrounding lymph spaces. In the latter case the tumors presented the characteristics of an endothelioma. He

1. See Fig. 221, Lang, Lehrbuch der vergleichende Anatomie der wirbellosen Thiere. Zweite Lieferung. Protozoa.

2. Loc. cit.

was able to determine that the presence of the parasite led to the proliferation of the nuclei of the infected cells.

Following Podwyssozki, von Leyden[1] likewise noted the similarity between bird's-eye inclusions and the ameboid form of plasmodiophora in the plant cell. Feinberg[2] emphasises the same similarity. Nösske does not think the similarity of the cell inclusions and the ameboid form of plasmodiophora to be so great.

All these comparisons, except that of Behla are based upon the publication of S. Nawaschin.[3] Upon receipt of this article we were greatly surprised at the remarkable similarity between many of Nawaschin's figures and bird's-eye inclusions in cancer. According to Nawaschin, the organism first appears in the plant in the form of an ameba, after having entered as a swarmer. These amebæ are found in the plant cells lying in the sap spaces and, except in very early infections, a number were found in each cell. The amebæ contain in their protoplasm when observed in the fresh state, highly refractive granules of equal size, which present an appearance very much like fat. The nuclei are spherical or oval and consist of a vacuolous structure with a central body. It is this nucleus which so resembles the bird's-eye inclusions. The organism having become transformed into an ameba in the plant cell, *lives a strictly symbiotic existence with the infected cell.* It divides by a special form of cell division which we shall consider in detail, and only when the plant cell is exhausted is the cycle inaugurated, which leads to spore formation.

FIG. 20.

Plate XX., Fig. 6. after Nawaschin.

This latter cycle, that of spore formation, is entirely distinct from the process of nuclear division by which the amebæ increase in number. In the younger forms of the organism (Fig. 20), the protoplasm surrounding the nucleus of the parasite is scarcely distinguishable from the protoplasm of the plant cell and extends into it in delicate prolongations. The change

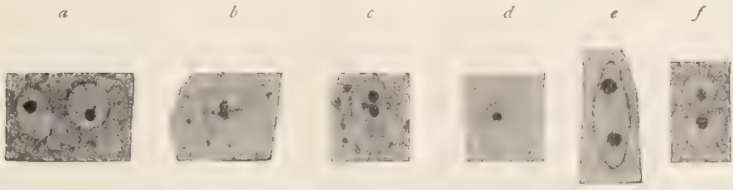
1. von Leyden, E.—Zur Aetiologis des Carcinoms. *Zeitschr. f. klin. Medecin*, Vol. XLIII., Part ½. Ueber die Parasiten des Krebses. *II. Ergänzungsband vom klinischen Jahrbuch.*

2. Feinberg.—Ueber den Erreger der krankhaften Auswüchse des Kohls (Plasmodiophora Brassicæ Woronin). *Deutsche med. Wochenschr.*, March 3, 1902.

3. Nawaschin, S.—Beobachtungen über den feineren Bau und Umwandlungen von Plasmodiophora Brassicæ Woron. im Laufe ihres intracellularen Lebens. *Flora*, 1899, Vol. LXXXVI., Part 5.

leading to nuclear division in the ameba, are first found in the appearance of fine grains of chromatin within the nucleus, scattered indiscriminately in the clear space between the central body and the periphery. (Fig. 21*a*.) The nuclei in this stage are somewhat larger than immediately after division. These chromatin granules group themselves about the central body which first becomes indistinct (Fig. 21*b*), and then divides. They are more or less definitely arranged in the form of a circle in the plane of the division. (Fig. 21*c*.) A section through the nucleus in this stage shows the two central bodies closely approximated, with the smaller chromatin granules in the transverse axis. A section in the transverse axis shows the central body surrounded by a ring of chromatin granules, presenting the appearance of a rosette. (Fig. 21*d*.) The nucleus

FIG. 21.



a Plate XX., Fig. 14, after Nawaschin.
b " XX., " 17*f*, " "
c " XX., " 17*e*, " "
d Plate XX., Fig. 17*d*, after Nawaschin.
e " XX., " 18*d*, " "
f " XX., " 15, " "

in this stage has already assumed an oval form and the central bodies then withdraw to the poles of the cell. (Fig. 21*e*.) In this stage they are sometimes connected by one or two threads of chromatin which later disappear. Division is then completed by the capsule folding in at the center, leaving two perfectly formed nuclei each with a central body, the two closely approximated. (Fig. 21*f*.) In this way a single ameba may possess a number of nuclei.

Aside from the characteristic nucleus, the protoplasm of the ameba is of interest, containing, as it does, in the fresh state, coarse granules of uniform size. These granules are blackened by osmic acid and on the extraction of the fat from the preparations they disappear, leaving a coarsely reticulated protoplasm. (Fig. 21*f*.) The central body of the nucleus, when stained with Flemming's triple stain, reacts variably to the stain. When in the ameboid form the central body of the nucleus stains brilliant red. In the first stage of spore formation, the central

body stains a deep blue-black. This point is of importance inasmuch as certain discrepancies in the staining of the central bodies of the bird's-eye inclusions have been previously noted.

The process which leads to spore formation is entirely distinct from that by which the ameba, as such divides. In preparation for this process the nuclei of the ameba divides repeatedly by the method already described, thus each ameba contains a number of small nuclei. The margins of the ameba then become indistinct, the nuclei likewise become less distinct and the different amebæ coalesce. The central body of the nucleus then becomes very indistinct, the protoplasm granular. The nuclei at this stage contain fine granules and are with difficulty distinguished from the surrounding protoplasm. The whole structure now forms a plasmodial mass. There now develops in each nucleus a well-defined spindle with medullary plate, all of the nuclei dividing at once. This process of division follows the recognised types of mitosis and when complete the entire mass breaks down into small amebæ, each containing one nucleus. These are at first of irregular shape and stain poorly. The irregularly shaped myxamebæ are gradually rounded and condensed until they ultimately form spherical bodies of similar size with well-defined margins, each containing a highly refractive central body. It is to be noted that *the complete spore again presents an appearance not unlike the nuclei of the amebæ.*

Recognising the great similarity between the bird's-eye inclusion in cancer cells and the nuclei of the ameba in plasmodiophora in the plant cell, a similarity which to a lesser degree is shared by spores of plasmodiophora, it occurred to us to search our preparations for evidence of some form of division in the inclusions, and likewise to determine if the protoplasm surrounding the inclusions could be distinguished from the remaining protoplasm of the epithelial cell. In searching our preparations we came upon one which has already served us for photography, the illustrations of which appear in our previous publication, being the low power illustrations on Plate VIII., Plate XIV., Fig. 1, Plate XVI.[1]

This preparation consisted of a thin section, approximately 2 mm. square, taken from the margin of a rapidly growing carcinoma of the breast. It contained a large number of inclusions, in many fields every cell containing one or more. The fixation of this preparation was unusually successful and the differentia-

1. *American Journal Med. Sciences.*

tion excellent. We had little difficulty in repeatedly finding forms extremely suggestive of the method of division, illustrated in Fig. 21—*a*, *c*, *d*, *e* and *f* from Nawaschin. Fig. 3, Plate I., was repeatedly found and appears to represent a stage similar to that shown in Fig. 21*a* Nawaschin. We next repeatedly encountered inclusions in which the central body had divided and in nearly every case found two small granules of chromatic material in the transverse axis so arranged as to present an appearance exactly like Fig. 21*e* from Nawaschin. In Fig. 4, of Plate I., an inclusion presenting this appearance is shown. The two granules in the transverse axis are extremely small and were photographed with difficulty. It is this form which, when sectioned in the transverse axis, produces the rosette appearance which was likewise repeatedly encountered. In Fig. 5 of Plate I., the central body lies somewhat below the plane of focus and the rosette appearance is not so characteristic as occasionally seen. Many forms were found in which the rosette was apparently sectioned in an oblique plane so that but one half of the rosette appeared in the inclusion. Fig. 6, of Plate I., shows what appears to be the next stage in the process of division, the two central bodies having withdrawn to the poles of the cell, and separation of the two by the capsule is suggested by the appearance of the inclusion. Bodies which had apparently divided were repeatedly found, Fig. 7, of Plate I., representing this stage. In Fig. 8, of Plate I., are likewise seen bodies cut somewhat obliquely, also representing this stage. We had no difficulty in finding all of these forms repeatedly.

A careful examination of the protoplasm surrounding the inclusions was made to determine whether a differentiation of the possible protoplasm of the parasite and that of the epithelial cell could be made. In many cases a distinct reticulation of the protoplasm was visible as in that surrounding the two inclusions in Fig. 7, of Plate I. In one or two portions of the section we found what appeared to be inclusions surrounded by reticulated protoplasm which had become detached from the nuclei of the cells in which they were included. Fig. 8, of Plate I., shows an inclusion of this sort surrounded by reticulated protoplasm, which has become detached from the nucleus of the cell lying slightly to the left. In certain cells we found large numbers of small inclusions closely packed. In these we were unable to find any evidence of the changes above described. Fig. 2, of Plate I., shows a cell containing a number of bodies some-

what more distinct than those containing the apparent nuclear changes.

A number of observers have undoubtedly spoken of similar groups of inclusions, as representing spore formation. (Bose, von Leyden, Jackson, Clarke.) The similarity of inclusions of the type shown in Fig. 2, of Plate I., to those already described, led us to repeat the experiments of Podwyssozki, for the purpose of ascertaining what appearance the spores of plasmodiophora brassicæ presented when embedded in the connective tissue and phagocytic cells of animals. This series of experiments was undertaken with uniform results. The spores could be found in the large connective tissue phagocytes embedded in the protoplasm of the cells. They consisted for the greater part of spherical bodies of vacuole-like appearance with a central body. Hardened and stained with Plimmer's method, they stained, as does the protoplasm, and presented an appearance in size, form and other characteristics indistinguishable from the cell inclusions in cancer. Fig. 1, of Plate I., represents two large phagocytic cells from the margin of an implanted fragment of clubroot in a guinea-pig, removed after nineteen days. The cell to the left contains a form of inclusion most commonly seen. Between the two cells are two larger forms which are constantly encountered in the fresh scrapings. These are spherical bodies with delicately defined limiting membranes and with fine granular contents or in some cases filled with homogeneous material. The two bodies shown lying directly between phagocytes are undoubtedly of this nature. It is probable that they represent a stage in degeneration of the spores. They are of interest inasmuch as bird's-eye inclusions in cancer are commonly encountered, which contain finely granular material and have invariably been quoted in support of the degeneration theory. It is evident that these spores under certain conditions undergo degeneration, which would render their differentiation from other products of degeneration difficult. Nösske has recently advanced a line of reasoning of this nature to show that all the bird's-eye inclusions represent a form of secretory activity on the part of the cells. Those who have studied the bird's-eye inclusions have apparently failed to consider the possibility of the inclusions, if of parasitic origin, undergoing a process of degeneration.

It will be seen from the foregoing that in the spores of plasmodiophora brassicæ, we have a form of parasite which, embedded in the protoplasm of a cell, frequently presents an

appearance indistinguishable from certain of the cell inclusions in cancer. It must, therefore, be conceded that the inclusions in cancer which so *closely resemble them are possibly of parasitic origin. Furthermore, the detection in the inclusions in a single slide, of a cycle of changes so closely representing the process of nuclear division in the ameboid form of plasmodiophora, must be viewed as strongly indicating the parasitic nature of these inclusions.*

Some of the phases of what we view as a process of nuclear division in the bird's-eye inclusions are indicated in the illustrations accompanying the articles of Soudakewitsch, Borrel and Plimmer. Fig. 2, *b*, which is Fig. 2, Plate VI., from Soudakewitsch, shows a body to the left and above which corresponds with Fig. 3 of the text from Nawaschin. Fig. 2, *c*, which is Fig. 7, Plate XII., from Soudakewitsch, represents a group of bodies nearly all of which present typical rosette forms. Fig. 2, *a*, which is Fig. 17, Plate XII. from Soudakewitsch shows a body to the left with two central bodies apparently in the act of dividing. Fig. 8, from Borrel, shows a large epithelial cell containing a number of inclusions, some with single central bodies, but a majority showing typical rosette forms. Fig. 16, *a*, from Plimmer (loc. cit.) shows an inclusion with central body surrounded by a number of grains of chromatin. Fig. 16, *b*, from Plimmer, shows a typical rosette form and Fig. 16, *c*, from Plimmer, shows three inclusions, two of typical rosette form and one with four bodies arranged in a manner not unlike Fig. 4, from Nawaschin. Under the head of Methods of Division, Plimmer (loc. cit.) states that the division into two is by far the most usual method of multiplication. This is effected, he believes, by a form of budding, or the nucleus becomes somewhat oval in shape and then divides into two parts. These soon become equal and separate, and then the capsule throws in septa from either side between the divided nucleus, which meet. They then separate from each other and become two separate individuals. The rosette form Plimmer interpreted as evidence of a form of division in which portions of the nucleus have become detached and arranged at the circumference of the organism. This he believes was followed by a process of segmentation with the formation of a number of parasites. With reference to the statement made by Plimmer that these bodies divide by a form of budding, we have never been able to detect any appearance confirming this observation. We are of the opinion that the

rosette form corresponds closely to that described by Nawaschin and shown in Fig. 5 of the text.

Conclusions.—In summing up we would conclude that the spores of plasmodiophora brassicæ in the phagocytic cells of both warm and cold-blooded animals, when fixed and stained with the methods employed in the investigation of bird's-eye inclusions in cancer, under certain conditions, present an appearance indistinguishable from these inclusions. Second, that a series of changes can be found in the bird's-eye inclusions in cancer closely resembling the process of nuclear division, as described by Nawaschin in the ameboid form of plasmodiophora brassicæ.[1]

Description of Plate.

Fig. 1. Large phagocytic cells from guinea pig, found at margin of implanted clubroot nineteen days after implantation. At *a* plasmodiophora spore embedded in protoplasm of cell. Central body of spore eccentrically placed. No condensation of cell protoplasm surrounding spore. At *b* two larger forms of spores containing protoplasmic masses (possibly partly developed swarmers).

Figs. 2 to 8 are taken from one slide, carcinoma of the breast, hardened and stained with Plimmer's method. Magnification of all figures, 1 to 8, × 940.

Fig. 2. Epithelial cell from carcinoma of the breast, containing 14 round cell inclusions of like size and appearance. Same magnification as Fig. 1 (Compare with *a*.)

Fig. 3. Cancer cells, containing large inclusions with well developed central bodies. Scattered between central body and periphery of inclusions numbers of chromatin granules. (Compare with first stage of division of intracellular ameba of plasmodiophora as shown by Nawaschin.)

Fig. 4. Elongated cell inclusion with two central bodies closely approximated. In the transverse axis two smaller grains of chromatin. (Compare with Fig. 2 from Nawaschin.)

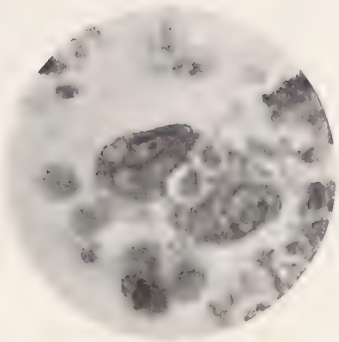
Fig. 5. Cross section of inclusion similar to that shown in Fig. 4. The central body lies just below the focal plane, the grains of chromatin arranged in the form of a rosette about it. (Compare with Fig. 3 from Nawaschin.)

Fig. 6. Oval inclusion with two central bodies widely separated at poles. Suggestion of division with two bodies barely visible. (Compare Fig. 4, Nawaschin.)

Fig. 7. Two inclusions immediately after division. Central bodies well defined. Inclusions surrounded by reticulated protoplasm.

Fig. 8. Group of cells containing inclusions. At *a* an inclusion surrounded by reticulated protoplasm has become detached from the cell in which it was embedded. The inclusion in the surrounding reticulated protoplasm presents an appearance extremely like the myxamebæ of plasmodiophora.

1. On the point of sending this article to press, we have received a short epitome in the *Deutsche Medizinal-Zeitung*, Beilag für Karzinomlitteratur, of an article by S. Prowazek, entitled "Zur Kernteilung der Plasmodiophora Brassicæ Woronin." It is impossible to judge from the epitome to exactly what conclusions the author has arrived, but it would appear that he has questioned the significance of the changes described by Nawaschin.



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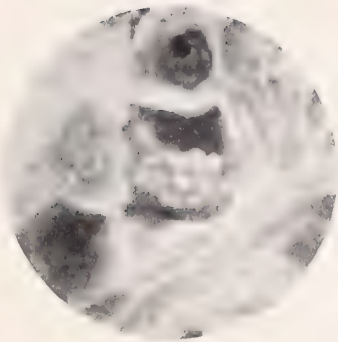

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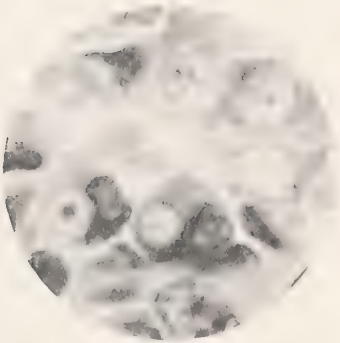

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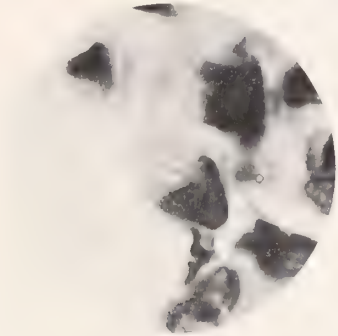

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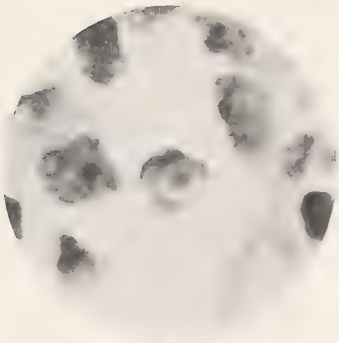

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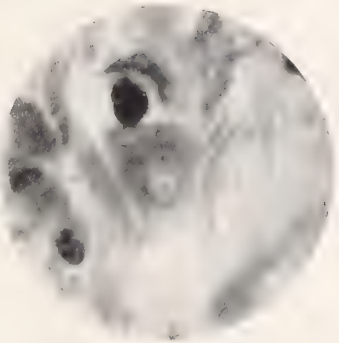

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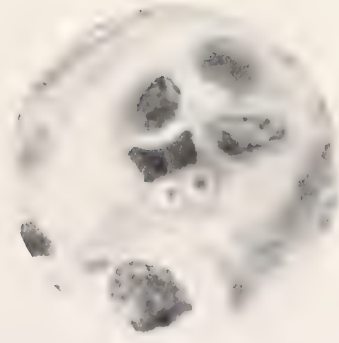

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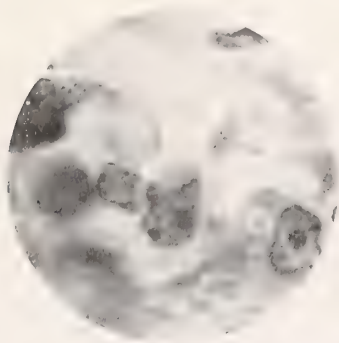

8

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine.

Stated Meeting, held March 31, 1903.

REPORTED BY F. W. McGUIRE, M. D., Secretary.

THE president, Dr. HERMAN E. HAYD, called the members to order at 9 p.m.

The minutes of the last stated meeting, held January 20, 1903, were read and approved.

The council recommended the election of Dr. Guiseppe Tartaro, who was duly balloted for and elected a member of the Academy.

Nomination of officers resulted as follows: president, Dr. Joseph W. Grosvenor; secretary, Dr. Edwin A. Bowerman; treasurer, Dr. Charles S. Jewett; and trustee for three years Dr. L. Schroeter.

The program of the evening was furnished by the section on ophthalmology, which consisted of a paper read by Dr. FRANK WHITEHILL HINKEL, entitled

A CONSIDERATION OF THE VALUE OF TOPICAL APPLICATIONS TO THE UPPER AIR TRACT.

It was discussed by Drs. Blaauw, Urban, Snow, Benedict and Hinkel.

The President appointed the following committee, composed of Charles S. Jewett, Thomas F. Dwyer, and J. H. Dowd, to prepare suitable resolutions regarding the death of Dr. William C. Fritz.

The chairman of the committee, GROVER W. WENDE, appointed to present resolutions regarding the death of Dr. Jacob M. Kraus, offered the following memorial:

The Buffalo Academy of Medicine hereby records its profound sorrow at the death of a fellow member, Dr. Jacob M. Kraus, which occurred on the 19th day of December, 1902.

Dr. Kraus was born in Clarence, N.Y., in March, 1866. He was a graduate of Parker's Union School, in his native town; he then studied medicine and was graduated from the University of Buffalo with the class of 1889. After two years of surbordinate service in the hospital connected with the Erie County Almhouse, Dr. Kraus was appointed to the position of house physician which he continued to hold until entering upon private practice.

He was specially interested in diseases of the skin and at the time of his death held the position of dermatologist, both to the

Buffalo German Hospital and the German Dispensary. He was a member of the New York State Medical Association, the Erie County Medical Association, the Roswell Park Medical Club, and was also a fellow of the Buffalo Academy of Medicine.

Dr. Kraus became a physician from the very love of medical science and was intelligent, conscientious, painstaking and progressive. The profession had in him one of its most honorable and useful members. He was honest and high-minded to a degree. In private life he was a modest gentleman and possessed in general combination the best qualities of a citizen. The sincerest sympathy of the Academy is hereby extended to his sorrowing family and it is ordered that this action be entered in its minutes.

GROVER WENDE, M. D.,
WILLIAM MEISBERGER, M. D.,
JOHN A. PETTIT, M. D.

It was moved and seconded that the memorial be adopted and spread on the minutes and a copy sent to the family. The chairman of the committee, Dr. Wm. C. Krauss, presented the following memorial of Dr. Herman Mynter:

WHEREAS, In the death of Dr. Herman Mynter, The Buffalo Academy of Medicine loses a former president and one of its most ardent workers; and,

WHEREAS, his zeal and energy coupled with his scientific attainments made him one of its most valued members. Therefore be it

Resolved, That the Buffalo Academy of Medicine tenders to his afflicted family its sincere sympathy, that this resolution be transmitted to them, and a copy be spread upon the minutes of the Academy.

WM. C. KRAUSS, M. D.,
EUGENE A. SMITH, M. D.,
L. SCHROETER, M. D.

Dr. M. D. MANN gave notice in writing to amend Article III. of the by-laws by adding the words "or hold office" after the words "to vote" in the last line.

Adjourned at 10 p.m. Attendance, 35.

Medical Society of the County of Erie.

Special Meeting, held March 18, 1903.

REPORTED BY CHAUNCEY P. SMITH, M. D., Acting Secretary.

The President, Dr. Ernest Wende, took the chair at 4.15 o'clock p.m.

Dr. H. R. Hopkins moved that Chauncey P. Smith be chosen acting secretary. Carried.

The president called upon Dr. H. R. HOPKINS to state the object of the meeting, who said that it was to give support to a legislative measure which was the result of a great deal of experience and study—namely, a bill to do away with the dual system of education in the State of New York. It was well known that the remarkably efficient institution, the University of the State of New York, conducted by the regents, had been in existence for over one hundred years. There was also a department of education under a superintendent of education, who had charge of the common schools. It is the belief of those who have examined the matter that it is best to unify and hold one body responsible for education. In other words, the object is to eliminate politics from our school system, and to substitute experienced educators as the governing body.

Dr. C. DIEHL moved that the chair appoint a committee of five to express fully to the legislature the ideas of the medical profession in regard to the subject under consideration. Carried. The president appointed as such committee Drs. Diehl, Hopkins, W. W. Potter, Abbott and Bull who reported the following preamble and resolutions:

WHEREAS, The Medical Society of the County of Erie, State of New York, has called this meeting of the members of the medical profession of the city of Buffalo and the County of Erie; and,

WHEREAS, As physicians and representatives of our several societies, we are unreservedly and unequivocally committed to the right of individual opinion and also to the paramount necessity for unity in action; and,

WHEREAS, We have for years noted with regret the lack of unity in the educational systems of our state; and,

WHEREAS, Legislation is now under consideration for the purpose of bringing about a much needed unification; and,

WHEREAS, We believe that education is the foundation of the protection and promotion of the public health, the safeguard of civil and religious liberty, the bulwark of civilization, and that in education only the most intelligent methods should prevail, also that in education there should be unity of direction; and,

WHEREAS, The University of the State of New York was conceived in the highest wisdom, and for more than a century has been conducted with marvelous ability and success and now holds the universal confidence of the educators and the educated; and,

WHEREAS, It is the purpose of a bill now before the legislature at Albany, know as the Stevens bill, to provide for such unification of the educational system of the State under the direction of the regents of the University; therefore

Resolved, That the medical profession of the City of Buffalo and the County of Erie hereby declares itself heartily in favor of the Stevens bill; that we urge our representatives to use all honorable efforts to secure its passage; that a copy of this declaration be sent to each member of our delegation and a copy to the Honorable James Russell Parsons, Jr., Secretary of the University, Regents' office, Albany, N.Y.

(Signed) Conrad Diehl,
Alex. T. Bull,
William Warren Potter,
Henry R. Hopkins,
George Abbott,
Committee.

The report was then debated by William Warren Potter, Eli H. Long, George Abbott, of Hamburg; A. W. Bayliss, W. B. Jolls, of Orchard Park; William C. Krauss and Chauncey P. Smith, after which it was unanimously adopted.

The legislative committee was charged with carrying out the provision to notify the Erie County delegation in the legislature, after which the meeting adjourned.

The Treatment of Chronic Cystitis.—Cases of chronic cystitis are generally of infective origin, many resulting from the upward extension of an inflammatory process in the posterior urethra. A particularly distressing form of the disease is that accompanying enlargement of the prostate. While in the treatment of chronic vesical catarrhs, local measures are often required, much benefit is derived from the internal administration of urinary antiseptics and antiblennorrhagics.

A new preparation embodying all the advantageous features of this class of remedies is uriform. Its antiseptic power is due to the liberation of formaldehyde in the urinary tract, thus preventing ammoniacal fermentation and keeping the urine in a sterile state.

Associated with this is the well-known beneficial action of saw-palmetto upon the mucous membrane of the bladder, as manifested by a diminution in the secretion of mucus and relief of the tenesmus. The other constituents of uriform (damiana and nux-vomica) exert a general tonic effect upon the nervous system, and help to overcome the relaxed condition of the mucous membranes usually present.

Uriform is palatable and well adapted for continued administration in these chronic cases.

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XLII.—LVIII. MAY, 1903. No. 10.

Exit Antonius.

THE most abandoned medical fakir that Buffalo has ever tolerated has been tried, found guilty and sentenced to imprisonment for conspiracy to defraud. Nearly two years ago a person calling himself "Antonius, the Boy Wonder," took up his residence in this city, and opened an "Institute of Science," where he carried on the business of pretending to heal the sick. In this enterprise he employed a physician legally authorised to practise medicine, presumably to protect himself against arrest. He gave public exhibitions of his pretense at a public hall, and boldly advertised his brazen scheme of deceit and fraud in the daily newspapers. And the newspapers published his statements that on their face were false!

There were, however, two notable exceptions, for the *Buffalo Review* and the *Catholic Union and Times* declined to enter the literary bargain of deception. It is to that sterling newspaper, *The Buffalo Review*, that the people are indebted for the conviction of this audacious villain. Under a former administration of the district attorney's office attempts had been made to bring Antonius to trial, but in vain. With the election of Mr. Edward E. Coatsworth to the office of district attorney last November, a new régime was instituted in that office. The *Review* at once began a crusade against the prince of fakirs, which was conducted daily in the columns of that paper, unfolding his schemes and branding his advertisements as falsehoods.

In February the grand jury returned three indictments against Anton J. Weichers, *alias* Antonius, the Boy Wonder (aged 39 years), and he was brought to trial in the March term of the criminal court, Mr. Justice Kruse, presiding. The indict-

ment selected was for conspiracy to defraud, and the prosecution was ably conducted by Mr. Frank A. Abbott, first assistant district attorney. The trial lasted five days and the culprit was defended by Mr. E. M. Bartlett in a masterful manner, every known expedient being resorted to to stay the hand of justice; but in vain! The jury appeared to have no difficulty in coming to a decision, the evidence being overwhelming, and a verdict of guilty quickly followed the able charge of the judge.

In imposing sentence Justice Kruse said so much that is of importance and general interest and, withal, his analysis of the case as set forth in the sentence is such an indictment against all who aided and abetted the fakir, that we print it in full as follows:

By whatever name you may have seen fit to have called the practice in which you were engaged, I am quite satisfied that it was all permeated with fraud and deception. There may have been isolate cases where people have received some relief from the physicians that you have had with you, but I think in general you have taken money from people, to which you were not entitled.

The practice adopted by you was well calculated to deceive the credulous and simple-minded. Many of them were of that class of people who are easily imposed upon, and if there is any class of people above another that the law should shield and protect from imposters, like yourself, it is that class of people. As they came upon the stand, one after another, some of whom testified for as well as against you, their condition excited pity. Their simplicity was pathetic. To their burden of chronic ailments in many instances was added that of poverty. You took their money and, in my judgment, you were not entitled to it.

It is, however, true that you have simply been convicted of a conspiracy to commit a fraud in connection with others, and not of the fraud itself, which of course is not so serious a crime as where a person actually commits the fraud. While the evidence does show that you did actually take money, yet that was not the crime for which you were being tried, although it was brought out in the testmony tending to show the unlawful scheme and conspiracy which you and your confederates hit upon, for the purpose of getting this money.

In the view which I take of your conduct, therefore, I can't be lenient in this case. The suggestion has been made by some of your friends that a fine ought to meet the requirements. I can't take that view of it. The law does not permit people like yourself to impose upon persons whose horizon in life has been narrow and circumscribed, and who are most easily imposed upon. It is necessary, in the interests of justice, that I should

impose imprisonment and the sentence of the court is that you be confined in the Erie County Penitentiary for the period of nine months.

Dr. Franklin S. Temple, who was lately an assistant to or co-worker with Antonius, was arrested about the middle of February on a bench warrant, based on three indictments found by the grand jury. One indictment charged him with grand larceny, another with conspiracy, and the third with practising medicine under an assumed name. His bail was fixed at $2,500, in default of which he was sent to jail, where he remained until he and his co-conspirator Antonius, the boy Wonder (aged 39 years), were arraigned for trial. Temple pleaded guilty, and after the trial and sentence of Antonius, Judge Kruse suspended sentence upon Temple. The remaining medical fakirs in Buffalo should take heed from these two cases. If they do not cease their fraudulent practices, there are a few vacant rooms in the penitentiary awaiting them on Front Avenue.

H. H. Bridgewater, who attempted to carry on "business" for Antonius, while he was undergoing trial, was fined $50 by Judge Murphy in Police Court, April 1, 1903, after being convicted of violating the health laws. The complainant in the case was the Medical Society of the County of Erie, which accused Bridgewater of illegally assuming the title of physician and practising medicine without a license. Being without funds, he was sent to the penitentiary for 50 days.

This is another notice served on the violators of the laws relating to the practice of medicine in this state. It would be well for them to understand at once that there will be a vigorous prosecution of each and all who transgress the laws of the state in spirit or in letter, so far as they relate to the practice of medicine.

Medical Bureau Pan-American Exposition.

DIRECTOR General Buchanan of the Pan-American Exposition, presented a very comprehensive report of his labors to the directors of the Exposition Company, and portions of it were printed in the daily newspapers. That portion, however, which is of most interest to the medical profession was not printed and the JOURNAL presents it herewith. After referring generally to various matters all closely allied to the department of medicine Mr. Buchanan says:

The report of the Medical Director of the Exposition, and that of the Commandant of Police, hereto attached respectively as Exhibits "E" and "F", having been separately printed and given to the public, are sufficiently well known to make any special reference to either unnecessary, but I cannot, in justice to both of the subjects involved, omit expressing the belief that the verdict, of all who observed the operations of both organisations, was that they were superior in every feature to those of a similar character in any of the previous expositions in our country. They were certainly more economically administered than any of those to which I refer and gave equal if not better results.

The part taken by the Medical Bureau of the Exposition in the immediate care and attention given President McKinley after the fatal attempt made on his life in Music Temple has made that bureau of the exposition a part of the permanent history of our country, and every one connected with the exposition cannot but feel proud of its conduct and of the services rendered by it at that critical moment. Certainly no word of mine could add to the high reputation so justly awarded by all to the distinguished medical director of the exposition, Dr. Roswell Park, but I may be permitted to express my great appreciation of the efficient, thorough and excellent service given the exposition by him and by all those associated with him in the discharge of the duties that belonged to that bureau.

During the life of the exposition and since the dimming of its myriad of lights, the JOURNAL has had occasion to refer to the excellence of organisation of the medical department and the very thorough manner in which this very important branch of administration was conducted. It has also printed the official report, which showed that Dr. Park achieved results which were never before even approached by the medical management of any other exposition. His attention to detail and the splendid efficiency of the staff which he chose to assist him in the work are in a measure responsible for this. A good general selects able lieutenants. At no time did Dr. Park relax his vigilance and to this fact, with his splendid executive ability, is due the remarkable record of the medical department of the Pan-American Exposition,—a record which stands out in the world's history of expositions, very nearly flawless in every respect. Mr. Buchanan was not at all extravagant in his praise of the medical bureau, for a record was made at the Pan-American Exposition which expositions of the future will find it hard to equal, if not impossible to excel.

In the Shade of Ygdrasil.[1]

By FREDERICK PETERSON.

HEREDITY.

I meet upon the woodland ways
At morn a lady fair;
Adown her slender shoulders strays
Her raven hair;

And none who looks into her eyes
Can fail to feel and know
That in this conscious clay there lies
Some soul aglow.

But I, who meet her oft about
The woods in morning song,
I see behind her far stretch out
A ghostly throng—

A priest, a prince, a lord, a maid,
Faces of grief and sin,
A high-born lady and a jade,
A harlequin—

Two lines of ghosts in masquerade,
Who push her where they will,
As if it were the wind that swayed
A daffodil.

She sings, she weeps, she smiles, she sighs,
Looks cruel, sweet or base;
The features of her fathers rise
And haunt her face.

As if it were the wind that swayed
Some stately daffodil,
Upon her face they masquerade
And work their will.

ENVIRONMENT.

High up around the mountain rock
Wild sweep the lightning and the storm;
The spruce grows firm against their shock,
Stunted and gnarled and rude of form,
With twisted roots that interlock.

But by the rivulet far below,
Up from the rich dark loam and drift,
Where storms come not and winds are slow,
Behold the stately willow lift
And sway long branches to and fro!

1. From the proceedings of the Charaka Club, Vol. I.

PERSONAL.

Dr. D. W. Harrington, of Buffalo, who has been in the South for some weeks on account of impaired health, has returned and is reported as much improved.

Hon. James O. Putnam, one of the most distinguished citizens of Buffalo, who suffered from a paralytic seizure some weeks ago, is improved, having recovered consciousness, speech and the complete use of his faculties. He is reported as progressing favorably toward recovery.

Dr. Augustus Pohlman, an instructor of Cornell University, son of Dr. Julius Pohlman of Buffalo, has returned from Germany where, during the past two years, he has been pursuing anatomical and other studies.

Dr. E. E. Blaauw, of Buffalo, recently entertained guests at dinner at the Iroquois in honor of Professor Carl G. Eigenmann, of the University of Indiana.

Dr. A. S. Freeman, of Buffalo, the veteran dentist, was tendered a complimentary dinner at The Iroquois, March 31, 1903, to commemorate the 40th anniversary of his dental practice in this city. It was attended by about 100 dentists and was presided over by Dr. C. W. Stanton, who acted as toastmaster. Dr. Freeman's speech was filled with reminiscences of the earlier years of his practice. Among the out-of-town guests present were: Drs. Frank French, R. H. Hofheinz, W. W. Smith, J. E. Line, Rochester; W. A. White, Phelps; G. W. Hoystradt, Ithaca; J. Granger, Mayville; A. M. Wright, Troy; and C. H. Sharp, Lockport.

Dr. and Mrs. Charles Cary, of Buffalo, sail for Europe early in May, to spend a few weeks in Continental travel.

Dr. Henry L. Elsner, of Syracuse, delivered an address at Elmira N. Y., on "Medicine of fifty years ago and of today," on the occasion of the celebration of the 50th anniversary of the Elmira Academy of Medicine, April 1, 1903.

Dr. Benjamin Franklin Rogers, of Buffalo, has removed his office from No. 221 Franklin Street to 222 Franklin Street, just

opposite, where he will continue the practice of ophthalmology. Hours: 9 to 1 and 3 to 4.

Dr. W. G. Macdonald, of Albany, read a paper before the section on surgery of the Buffalo Academy of Medicine, Tuesday evening, April 7, 1903, the subject of which was "The rôle of cholecystitis in acute inflammations of the peritoneum, with report of cases." It was an admirable and scholarly presentation of a topic of most absorbing interest. The diction and rhetoric of the paper should serve as a model to stimulate others to careful preparation, when presenting themes before medical societies.

Dr. Edgar A. Forsyth, of Buffalo, has removed from 326 Franklin Street to 322 Franklin Street, where he will continue the practice of laryngology. Hours: 9 to 1 and 7 to 8. Both telephones.

Dr. Nelson W. Wilson, of Buffalo, sanitary officer of the Pan-American Exposition, was recently invited to St. Louis, to give the benefit of his experience in the sanitary management of the Buffalo exposition to the management of the Louisiana Purchase Exposition. We expect to print something from Dr. Wilson's facile pen, touching his observations of the St. Louis Fair.

Dr. William G. Taylor, of Buffalo, has received an appointment to the medical staff in the children's department of St. Mary's Infant Asylum in this city.

Dr. William Meisburger, of Buffalo, has removed from No. 355 Genesee Street to No. 891 Michigan Street.

Dr. Montgomery A. Crockett, of Buffalo, who has recently spent some time in the South during convalescence from a severe illness, has returned fully recovered and resumed his professional practice and teaching. His office and residence are at 452 Franklin Street.

Dr. William C. Krauss has been reappointed by Governor Odell a member of the Board of Visitation for the Buffalo State Hospital.

Dr. Herman E. Hayd, of Buffalo, has been elected surgeon to the Buffalo German Hospital, vice Herman Mynter, deceased.

Dr. Thomas B. Carpenter, of Buffalo, has removed from No. 142 North Pearl Street to No. 533 Franklin Street. Hours: 3 to 4 and 7 to 8. Telephone, Tupper 304.

Professor von Mikulicz, of Breslau, the renowned German surgeon, visited Buffalo, April 25, 1903, and was the guest of honor at a complimentary dinner tendered him by representative members of the medical profession of this city. The dinner was served at the Iroquois, about thirty covers being laid. The occasion was full of pleasantry and delightful incidents and will be long remembered by the participants. The special object of Professor von Mikulicz's visit to this country is to take part in the proceedings of the congress of American Physicians and Surgeons, at Washington, May 12-14, 1903, where is scheduled to discuss the surgery of the pancreas.

Dr. Charles O.Chester, of Buffalo, has removed from No. 217 to No. 326 Franklin Street. He has purchased the last-named property and will continue the practice of laryngology permanently at that number. Hours, 9-1, and 7 p.m.. Both telephones.

Sir James Grant, of Ottawa, Can., has recently celebrated his jubilee as a member of the medical profession by a dinner and a smoking concert, with which he entertained his friends in St. Andrew's Hall, February 4, 1903. Sir James, who is one of the most prominent members of the Canadian profession, is the father of Dr. Henry Y. Grant, of Buffalo.

Hon. Charles S. Francis, of Troy, has been elected by the legislature a regent of the University of the State of New York, vice Hon. Martin I. Townsend, deceased.

OBITUARY.

Dr. William C. Fritz, of Buffalo, U. of B., '92, died suddenly March 31, 1903, aged 36 years. He had been ill for about three months with rheumatism and his heart became involved. He was thought to be convalescing and called upon Dr. Eugene A. Smith, who was ill, on the morning of the day of his death. While in conversation with Dr. Smith, Dr. Fritz, sank in his chair, gasped for breath and in an instant more was dead. Dr.

Fritz was regarded as one of the rising younger physicians of this city, and was instructor in clinical surgery at the University of Buffalo. He is survived by a widow and three children.

Dr. Edward Watrous Jenks, of Detroit, died March 19, 1903, aboard a railway train on which he was returning from Mexico. He contracted pneumonia en route and died suddenly. Dr. Jenks was one of the distinguished physicians of the country and a most genial personality, who will be widely missed and mourned.

Dr. Harvey L. James, of Shelby, N. Y., an alumnus of the University of Buffalo, class of 1881, died at his home March 14, 1903, aged 46 years. He had been ill for a long time, his disease being phthisis pulmonalis.

SOCIETY MEETINGS.

The National Association of United States Pension Examining Surgeons, will hold its second annual meeting at Washington, D.C., May 13-14, 1903. The secretary, Dr. Wheelock Rider, of Rochester, N. Y., has prepared the following program: Address of welcome, Hon. E. F. Ware, Commissioner of Pensions; Rheumatoid affections considered as pensionable disabilities, P. Y. Eisenberg, Norristown, Pa.; Physical signs of the heart: How detected and how described, C. W. S. Frost, Waterbury, Conn.; The etiology of some pensioned disabilities measured by modern pathology, W. T. Sarles, Sparta, Wis.; Diseases of the respiratory tract, William Warren Potter, Buffalo, N.Y.; Address, Sam Houston, Medical Referee, Bureau of Pensions, Washington (by invitation); Insanity in connection with the service in the Philippine Islands, Ernest F. Robinson, surgeon U. S. navy, Kansas City, Mo. (by invitation); A cursory survey of the pension examiner's work, G. Law, Greeley, Col.; Hints to the general board surgeon on eye and ear examinations, J. O. Stillson, Indianapolis, Ind.; Diagnosis of malaria and its sequelæ, John C. Hemmeter, director, clinical laboratory, Baltimore, Md., University of Maryland (by invitation); Insanity as a result of physical conditions, A. B. Richardson, superintendent Government Hospital for the Insane, Washington (by invitation); President's address, William A. Howe, Phelps, N. Y.

The headquarters of the association will be at the Riggs

House, 15th and G. Streets, and the place of meeting will be at hall of Georgetown Law School, E Street, between 5th and 6th Streets.

On invitation of the Commissioner of Pensions, the members will visit the Pension Bureau, Wednesday or Thursday afternoon. A reception for members and their families has been arranged for Wednesday evening.

On convening at 10 a.m. on Wednesday the association will consider the report of the executive committee, the proposed constitution and by-laws, reports of secretary and of treasurer, etc. The final business session will be held on Thursday afternoon.

The Buffalo Academy of Medicine held meetings during the months of March and April, 1903, as follows:

Section on Ophthalmology, Otology and Laryngology.—Stated meeting, Tuesday, March 31. Program: A consideration of the value of topical applications to the upper air tract, F. Whitehill Hinkel.

Section on Surgery.—Tuesday evening, April 7. Program: The rôle of cholecystitis in acute inflammation of the peritoneum, with report of cases, W. G. Macdonald, Albany, N. Y.

Tuesday evening, April 14. Program: The reduction of the eye in cave animals, (illustrated by stereopticon), Prof. Carl Eigenmann, Indiana University, Bloomington, Ind.

Section on Obstetrics and Gynecology.—Tuesday evening, April 21. Program: Injuries to the parturient canal during labor; their prevention and treatment, C. E. Congdon. Complications of gonorrhea in the female, H. D. Ingraham.

The American Medical Association will hold its 54th annual meeting at New Orleans, May 5-8, 1903. The Illinois Central Railroad (see adv. p. xxxi.) offers splendid accommodations, via Cincinnati or Chicago, at one fare for the round trip. For particulars G. B. Wyllie, General Passenger Agent, 210 Ellicott Square, Buffalo, should be consulted.

A Sanitary Congress which will consider matters of international importance will be held at Bradford, England, from July

7 to 11, 1903. Ambassador Choate has informed the state department at Washington of this fact, and that the United States is invited to send representatives to the congress.

The American Academy of Medicine will hold its 28th annual meeting at the Arlington Hotel, Washington, D. C., Monday and Tuesday, May 11 and 12, 1903, under the presidency of Dr. Charles McIntire, of Easton, Pa.

COLLEGE NOTE.

The medical department of the University of Buffalo will hold its 57th annual commencement, Wednesday, May 6, 1903, at the Teck Theatre, when the degree of doctor of medicine will be conferred upon 49 candidates.

The alumni association will hold its annual meeting on the same day, in the morning of which the classes of '53, '63, '73, '83 and '93 will hold reunions. At the afternoon session, Dr. William T. Sedgwick, professor of sanitary science in the Massachusetts Institute of Technology, Boston, will present the subject of Protection of the public health by the filtration of water supplies, illustrated by the stereopticon. A discussion thereon will be participated in by Drs. Walter D. Greene, Ernest Wende, Herbert M. Hill, Henry R. Hopkins and Herbert U. Williams, of Buffalo; Dr. A. W. Henchell, of Rochester, and Dr. W. R. Campbell, of Niagara Falls. At the banquet, in the evening, which will be given at the Iroquois, at 6.30 o'clock, the principle speaker will be Professor F. D. Fosdick, principal of Masten Park High School, Buffalo. Besides this one there will be other speeches and specialties that will round up the occasion in an entertaining manner.

BOOK REVIEWS.

Obstetrics. A Textbook for the use of Students and Practitioners. By J. Whitridge Williams, Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief to the Johns Hopkins Hospital; Gynecologist to the Union Protestant Infirmary, Baltimore. Octavo, pp. 867. With 8 colored plates and 630 illustrations in the text. New York and London: D. Appleton & Co. 1903. [Price, $6.00.]

This treatise considers obstetrics in eight sections, in the following order—anatomy, physiology and development of the ovum, physiology of pregnancy, physiology of labor, obstetric

surgery, pathology of pregnancy, pathology of labor, and pathology of the puerperium.

The studies of the anatomy of the uterus and its adnexa are unique, and afford the student opportunity for attractive occupation in the acquirement of completer knowledge. The development of the ovum and placenta have never been set forth as well in a work on obstetrics, according to our view, as by Williams. The illustrations showing the structure of the placenta are admirable.

In the section on obstetric surgery, beginning with induction of abortion and accouchement forcé, including forceps and version, Cesarean section and symphysiotomy, destructive operations, and ending with operative procedures which do not aim at delivery, is found quite the most ample handling of operative obstetrics that has yet been published in such a treatise. Here, again, illustrations supplement the text in an instructive fashion.

Williams's dealing with contracted and otherwise deformed pelves, and the management of labor in such conditions, is most satisfactory. Injuries of the birth canal, infection, hemorrhage, and the puerperium are all prepared by one who understands the greatest need of the student, and he tells him in the fewest and plainest words possible what he must know to obtain success in the practice of obstetrics. It is a book made by a clinician, which gives the most advanced exposition of the art and is a distinct addition to obstetric literature.

Much original work has been done in the way of illustration, as well as in the preparation of the material of many chapters, and the whole subject matter is presented in an original manner. The book is a credit to both author and publisher.

HUNTINGTON'S ABDOMINAL ANATOMY. The Anatomy of the Human Peritoneum and Abdominal Cavity considered from the Standpoint of Development and Comparative Anatomy. By GEORGE S. HUNTINGTON, M. D., Professor of Anatomy in the College of Physicians and Surgeons, Columbia University, New York City. In one quarto volume of 292 pages, including 300 full-page plates in colors and monochrome, containing 582 figures. Philadelphia and New York: Lea Brothers & Co. 1903. [De luxe edition, gilt top, uncut edges, $10.00 net.]

The study of anatomy, always fascinating, has been conducted on the lines of ultraestheticism by this author, for which he deserves the thanks and congratulations of a large and ever increasing class of students in anatomy. The publication of this work marks a novel departure, both in material and construction, from the well-beaten paths that have been left in the wake of previous teachers, authors, and publishers of anatomical treatises. The book-making art is developed to the highest standard practical for medical works in this handsome *edition de luxe*, in which paper, binding, letter-press, and artistic illustrations combine and blend with exquisite taste and skill. In a book of not quite 300 pages, there are 300 full-page plates, containing 582 figures,—a most remarkable wealth of illustration.

The author disclaims to offer a complete or detailed account of the development of the abdominal cavity and its contents, but aims rather to utilise certain embryological facts in attempting to explain complicated adult conditions encountered. All through the work appears proof of the value of appealing to embryology and comparative anatomy, for aid in elucidating the sometimes difficult and often complicated morphological problems which confront the student, and lie along his pathway in studying the anatomy of the human adult.

In view of the improved surgery of the liver and gall-bladder, Huntington's studies of the development of the liver will prove of interest, particularly as surgeons are constantly offering proof that the gall-bladder is not an essential to healthy life. Therefore, when this author asserts that the biliary bladder (p. 144) is only a modified portion of the hepatic duct, he offers proof in support of its nonessential character. For similar reasons the parts relating to the intestinal tract, the cecum, and the vermiform appendix will attract the attention of surgeons. It will stimulate further studies in the direction taken and in the field mapped out by this author. Huntington's description of the changes in the position of the cecum and appendix and especially the schematic drawings, illustrating the stages in the rotation of the intestinal canal and descent of the cecum, are full of interest.

The entire work reflects the greatest honor upon Professor Huntington and on Columbia University. It is difficult to understand, however, why in such a masterful treatise the ancient spelling of such words as cecum and fetal should be adhered to. The elimination of the diphthong æ in these and similar words, is in keeping with the teaching of the best modern philologists.

A Textbook of Materia Medica, Therapeutics and Pharmacology. By George F. Butler, Ph. G., M. D., Professor of Materia Medica and Therapeutics in the College of Physicians and Surgeons, Chicago, Medical Department of the University of Illinois, etc. Fourth edition, thoroughly revised. Octavo volume of 896 pages, illustrated. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $4.00 net; sheep or half-morocco, $5.00 net.]

Butler's work on therapeutics was undertaken with the immediate object of supplying the student of medicine with a clear, concise and practical textbook, adapted for permanent reference no less than for the requirements of the class room. The arrangement of the work was somewhat out of the ordinary —the author believing that the synthetic classification of drugs based upon therapeutic affinities to be the most rational, and one calculated to engage the interest of those to whom the academic study of the subject is wont to offer no little perplexity. On these lines, three editions of Butler have become exhausted and the present—fourth—edition is before the profession. Some changes have been made in this edition—namely, a thorough

remodeling of the opening chapters, to bring them into accord with recently discovered biological phenomena.

Naturally, the pharmacology and therapeutics of each drug have been carefully revised, and changes made in the expression of opinion regarding the utility of the newer drugs, notably the synthetics, which larger opinion has modified, resulting in more definite conclusions. The chapters on organotherapy, serum therapy, and cognate branches have been enlarged and thoroughly revised.

Perhaps the most important addition is the chapter devoted to the interesting phases of the newer theories of electrolytic dissociation as revealed by Dresser, Loeb and others. The author believes that it cannot be long before an entirely new analysis of the action of drugs will have to be made. He asserts that pharmacology has acquainted itself fairly well with the superficial attributes of drugs, and the question to be asked is how or why do they act to bring about these results. The chapter is an interesting review of Loeb's work in this department of physical chemistry, and is made clear by the author's inimitable style.

A general index and an extended clinical index serve to make the volume an exceedingly useful one, and it can be heartily recommended to the profession at large. Paper, print and binding are of excellent quality. W. C. K.

Surgical Anatomy and Operative Surgery. For Students and Practitioners. By John J. McGrath, M. D., Professor of Surgical Anatomy and Operative Surgery at the New York Post-Graduate Medical School; Visiting Surgeon to the Harlem Hospital, and Assisting Visiting Surgeon to the Columbus Hospital, New York. Illustrated with 227 illustrations, including colors and half-tones. Pages xiv–359. Royal octavo. Philadelphia: F. A. Davis Company. 1903. [Extra cloth, $4 00 net; sheep or half-Russia, $5.00 net, delivered.]

In this book is found a blending of anatomy and surgery in a convenient form for both undergraduate and surgeon. Surgical anatomy and operative surgery go hand in hand throughout the work, a plan that is based upon the well-established fact that a knowledge of the one is necessary to the proper study and successful practice of the other.

It is illustrated largely by diagrammatic drawings, which the author has found the most satisfactory method for teaching purposes, and the whole arrangement of the treatise follows the plan adopted by him in his courses at the Post-Graduate Medical School.

The volume is constructed on new lines, and will be criticised by the ultra conservatives perhaps; nevertheless, it is a useful and instructive book, in spite of its eccentricities. It has made an attempt to introduce the new spelling, by dropping the final e in *cocaine*, for example; but if it insists upon this, why should it not also expel the final e from *muriate?* Under the head "Congenital deformities of the face" the author presents a

lesson in embryology, which is somewhat unique, but instructive. The work is commendable and shows thorough knowledge of the subjects dealt with by the author.

A Treatise on Massage. Its History, Mode of Application and Effects, Indications and Contraindications. By Douglas Graham, M. D., Boston. Third edition revised, enlarged and illustrated. Octavo, pp. 462. Philadelphia and London: J. B. Lippincott Company. 1902. [Price, $4.00.]

The first edition of this work was published in 1884, and was the first book on massage in point of time in the English language. Since then the progress made has been considerable and has called forth new editions of this able work. The range of usefulness of massage has been steadily increasing and has long since extended into every special and general branch of medicine, so that it is important for the physician who desires to keep pace with its development to be well informed in all its special lines. This volume not only describes the correct methods of applying massage, but deals with the specific treatment of various disorders and diseases of the whole human system. Thus each disease is taken up in order, and the indications and contraindications pointed out with the special technic most advisable in each case. In looking through the list of diseases in which massage is indicated, it is found beneficial to some extent in nearly every disease to which mankind is heir, external as well as internal.

In nervous diseases especially it has been found exceedingly useful, and in none more so than in neurasthenia. Graham gives special attention to the application of massage in this disease, the relative value as met with in either sex, and those cases where it does little if any good. In rheumatism, gout, hepatic and renal disorders, it indicates a line of treatment of great benefit to remedial procedures.

It is in all a valuable book for the physician to possess,—just at the present time when physical therapeutic methods are attracting so much attention. The illustrations are excellent; paper and binding are very satisfactory. W. C. K.

Culbreth's Materia Medica and Pharmacology. Third edition. A Manual of Materia Medica and Pharmacology. Comprising all Organic and Inorganic Drugs, which are and have been official in the United States Pharmacopeia, together with important Allied Species and Useful Synthetics. By David M. R. Culbreth, M. D., Professor of Botany, Materia Medica, and Pharmacognosy in the Maryland College of Pharmacy, Professor of Materia Medica and Pharmacognosy in the University of Maryland Medical and Dental Schools, Baltimore. Third edition, enlarged and thoroughly revised. In one octavo volume of 905 pages, with 473 illustrations. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $4.75 net.]

This work has rapidly grown into favor as a textbook, it being something more than a manual, as modestly claimed in its title. This revision has taken up the proposed official list of

drugs and pharmaceutical preparations, determined upon by the committee charged with revising the pharmacopeia soon to issue. In this way the author has been enabled not only to improve the subject-matter of former editions, but to give new material of interest and importance; also to compile the recapitulation tables in accordance with the official list.

The author has devoted considerable space to the pronunciation of troublesome words, and has paid attention to accentuation, making the work conform to modern philology,—very important points for students, who often find them perplexing.

The literature of materia medica and its cognate topics has been enriched to a considerable degree in late years, but there has been no more conscientious or instructive contribution than Culbreth's book; hence it affords a real pleasure to the reviewer to commend it both to undergraduate students and physicians.

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof. Dr. Carl von Noorden, Physician-in-chief to the City Hospital, Frankfort a. M. Authorized American edition translated under the direction of Boardman Reed, M. D., Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part II, Nephritis Duodecimo, pp 112 New York: E. B. Treat & Company. 1903. [Price, $1.00.]

The diseases of the kidney, both acute and chronic, are becoming more and more understood with each succeeding year, and as knowledge increases in this direction there is unfolded a new chart of a field beyond, sometimes more important to explore than its predecessor. The lesson is constantly being taught, with increasing insistence, that diet is the all-important factor in controlling or curing nephritic disease.

This essay will do much to strengthen the argument for more careful dietetic care and for stringent therapeutic measures. It is original in many respects of its treatment of the subject, and will repay well most attentive reading. It is one of the best dressed monographs we have seen in many a day.

Transactions of the American Surgical Association. Twentieth annual meeting, held at Albany, June 3–5, 1902. Richard H. Harte, M. D., Recorder of the Association. Philadelphia: William J. Dornan, Printer. 1902.

This volume constitutes a full record of the proceedings of this association at its twentieth annual meeting, but nowhere in the book does it appear where the meeting was held. It would not seem objectionable to record this fact in each volume, and even it might become of importance to have it known.

The group of papers herein published comprise a valuable contribution to the literature of surgery and should be in the hands of every teacher of the topic. They give, in most instances, the personal experience of prominent American sur-

geons upon technical subjects or points of practice, and will serve as a guide in similar conditions whenever they arise.

We cannot refer to each paper in detail but desire to invite particular attention to one by Rudolph Matas, of New Orleans, relating to the radical cure of aneurism based upon arteriorrhaphy, in which he gives the technic with illustrations, and reports four cases successfully operated by the method. Dr. Matas gives a full account of the operation and refers to Dr. J. B. Murphy's paper on dealing with aneurisms by suture, published in 1897. Dr. Matas, himself, makes a notable contribution to the subject in this communication which will attract the attention of surgeons.

Transactions of the Twenty-fourth Annual Meeting of the American Laryngological Association, held at Boston, Mass., May 26, 27 and 28, 1902. James E. Newcomb, M. D., Secretary. New York: Rooney & Otten Printing Co. 1902.

The meeting of which this book contains the proceedings was held at Boston under the presidency of John W. Harlow. It contains an unusual number of scientific papers, principally of interest to the laryngologist. There, are, however, a few papers of general interest, among them one on foreign bodies in the bronchus, one on incised wounds of the larynx, two on hay fever, one on an epidemic of non-suppurative cervical adenitis, and one on precautions to be observed in the use of suprarenal extract in the nose. The latter is a short article by John O. Roe, of Rochester, and is of interest to every one who uses suprarenal extract.

We are at a loss to understand why, in a book of this kind, each contribution is labeled "paper"—much on the plan of the schoolboy who labeled his drawing "this is a horse," though with less import. It would seem more in keeping with a scientific book like this, to omit such a superfluous designation.

We confess to a fondness for the transactions of this dignified association, published in a modest fashion, but always full of good material.

Lea's Series of Medical Epitomes. An Epitome of Physiology. For Students and Practitioners of Medicine. By Theodore C. Guenther, M. D., Assistant Physician, Norwegian Hospital, Brooklyn, and August E. Guenther, B. S., formerly Assistant in Physiology in the Medical Department, University of Michigan, Ann Arbor. Series edited by Victor C. Pedersen, A. M., M. D., Clinical Assistant in Surgery at the New York Polyclinic Medical School and Hospital. In one 12mo volume of 250 pages, with 57 engravings. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $1.00 net.]

In order to become a useful physician one must learn physiology, and learn it well. He must master the science from the lowest beginning point, and he must have ample laboratory teaching, as well as good textbook instruction. This excellent little work cannot supplant, but it may supplement the latter.

Indeed, that is precisely its design, which it admirably fulfils. The authors have told the essentials of the subject in an interesting manner,—concisely, succinctly, scientifically,—and it cannot fail to become a valuable aid to the study of physiology. It is more than a compend, but less than a textbook, and fills a useful place in helping one to acquire a better knowledge of the subject with which it deals.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Comprising ten volumes on the year's progress in medicine and surgery. Issued monthly under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume III. The Eye, Ear, Nose and Throat. Edited by CASEY A. WOOD, C. M., M. D., ALBERT H. ANDREWS, M. D., T. MELVILLE HARDIE, A. M., M. D. Chicago: The Year Book Publishers. 1902. [Price, $1.50; entire series, $7.50.]

The departments or topics considered in this volume are the eye, by Casey A. Wood; the ear, by Albert H. Andrews, and the nose and throat, by T. Melville Hardie. The advances in these several branches of medicine have been studiously recorded by competent observers, and the literature of the year has been well gleaned for the purpose of grouping in a single book, all the really valuable suggestions that clinical research or experimental work has brought out.

In the article on the ear, Dr. Renner's paper, published in this journal, June, 1902, is not only referred to, but liberally quoted. The methods of diagnosis and treatment of the diseases of the ear have improved very much in recent years, as will be observed by examining this work. It is as complete in all its topics as it could be made, and well repays the investment.

THE JOHNS HOPKINS HOSPITAL REPORTS. Volume X. Nos. 6, 7, 8, 9. Baltimore: The Johns Hopkins Press. 1902.

This volume of reports deals with metabolism in albuminuria, by Charles P. Emerson; regenerative changes in the liver after acute yellow atrophy, by W. G. MacCullum; surgical features of typhoid fever, by Thomas McCrae and James F. Mitchell; and the symptoms, diagnosis and surgical treatment of ureteral calculus, by Benjamin R. Schenck. Dr. Emerson's study of the metabolic changes in albuminuria is an interesting contribution to the literature of an important subject. The other monographs, too, are scholarly contributions to their several topics. A more substantial binding would be in better harmony with the excellent presswork and paper of these reports.

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY. Twenty-seventh annual meeting held at Atlantic City, May 27–29, 1902. J. RIDDLE GOFFE, M. D., Secretary. Philadelphia: William J. Dornan, Printer. 1902.

The material in this volume is interesting and points to progress in the history of the society. The changes in the

personnel of the organisation, as shown by the lists, have been many in twenty years,—death, resignation, and other casualties having wrought the usual modification. New members, however, have been added from time to time, keeping the working force still strong.

The papers in this book cover many interesting portions of the field of gynecology, and will be read with profit by physicians outside the membership of the society. A contribution of special interest is that of Thomas A. Ashby, of Baltimore, relating to spleenectomy for wandering spleen. Many other papers of value go to make up an interesting book.

LEA'S SERIES OF MEDICAL EPITOMES. A Manual of Obstetrics for Students and Practitioners. By W. P. MANTON, M. D., Adjunct Professor of Obstetrics and Professor of Clinical Gynecology, Detroit College of Medicine. In one 12mo volume of 265 pages, with 82 illustrations. Philadelphia and New York: Lea Bros & Co. 1903. [Cloth, $1.00.]

The author of this number of the epitome series is to be credited with having done well in condensing a comprehensive subject, without inflicting violence to its essentials. Only a person of experience in teaching and writing could accomplish this result. This book will serve to aid a person who already understands the subject, to refresh his memory on forgotten details. This is its real object, rather than to act as a foundation for the study of obstetrics. An undergraduate may use it in preparing for faculty examinations, and a candidate may read it with advantage in preparation for state licensing examinations. It contains many excellent engravings, and is a commendable epitome of the topic of obstetrics.

PROCEEDINGS OF THE AMERICAN MEDICO-PSYCHOLOGICAL ASSOCIATION at the Fifty-eighth Annual Meeting, held at Montreal, P. Q., June 17–20, 1902. C. B. BURR, Secretary. Published by American Medico-Psychological Association.

Although this association is one of the largest of the special medical societies, before which a number of valuable papers are read, it has seen fit to publish its transactions bound in paper. This is unfortunate, for such books become lost and are seldom used for reference. The material it contains, however, is excellent.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Ten volumes. Issued monthly, under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume X. Skin and Venereal Diseases, Nervous and Mental Diseases. Edited by W. L. BAUM, M. D., and HUGH S. PATRICK, M.D. Duodecimo, pp. 245. Chicago: The Year Book Publishers. 1902. [Price, $1.25; entire series, $7.50.]

Volume X. of the Practical Medicine Series is devoted to skin and venereal diseases and to nervous and mental diseases.

These year books have become very popular with the profession and deserve all the success attained. The several departments are edited by competent writers and the literature of the world is succinctly reviewed. The part devoted to nervous and mental diseases covers an unusually wide field of literature, and the review and annotations made by Dr. Patrick are most useful and instructive. The index is carefully compiled and enables the reader to seek quickly the desired information. The price of the volume has been reduced to $1.25. W.C.K.

BOOKS RECEIVED.

The Care of the Baby. A Manual for Mothers and Nurses, containing Practical Directions for the Management of Infancy and Childhood in Health and in Disease By J. P. Crozer Griffith, M. D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Physician to the Children's Hospital, Philadelphia. Third edition, thoroughly revised. 12mo volume of 436 pages, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Co. 1903. [Cloth, $1.50 net.]

Uterine and Tubal Gestation. A Study of the Embedding and Development of the Human Ovum, the early Growth of the Embryo, and the Development of the Synctium and Placental Gland. By Samuel Wyllis Bandler, M. D, Instructor in Gynecology in New York. Post-Graduate Medical School. Small octavo, pp. 170. Illustrated by 93 drawings. New York: William Wood & Company. 1903. [Price, $1 50.]

Diseases of the Heart and Arterial System. Designed to be a Practical Presentation of the Subject for the Use of Students and Practitioners of Medicine. By Robert H. Babcock, A. M., M. D., Professor of Clinical Medicine and Diseases of the Chest, College of Physicians and Surgeons, Medical Department of the Illinois State University, Chicago. Octavo, pp. 874. With three colored plates and 139 illustrations New York and London: D. Appleton & Company. 1903. [Price, $6.00.]

The Practical Medicine Series of Year Books Comprising ten volumes on the year's progress in Medicine and Surgery. Issued monthly under the general editorial charge of Gustavus P Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School Volume IV. Gynecology. Edited by Emilius C. Dudley, A. M., M. D, Professor of Gynecology, Northwestern University Medical School, Chicago, and William Healy, A. B., M. D., Instructor in Gynecology, Northwestern University Medical School, Chicago: The Year Book Publishers. 1902. [Price, $1 25; entire series, $7.50.]

Tuberculosis. Recast from Lectures Delivered at Rush Medical College, in affiliation with the University of Chicago. By Norman Bridge, A. M., M. D., Emeritus Professor of Medicine in Rush Medical College; Member of the Association of American Physicians. Duodecimo volume of 302 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1903. [Cloth, $1 50 net.]

A Textbook of Legal Medicine and Toxicology. Edited by Frederick Peterson, M D., Chief of Clinic, Nervous Department of the College of Physicians and Surgeons, New York; and Walter S Haines, M. D, Professor of Chemistry, Pharmacy, and Toxicology, Rush Medical College, in affiliation with the University of Chicago. Two imperial octavo volumes of about 750 pages each, fully illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1903. [Per volume: Cloth, $5.00 net; Sheep or Half Morocco, $6.00 net.]

Medical Jurisprudence, Insanity, and Toxicology. By Henry C. Chapman, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College, Philadelphia. Third edition, thoroughly revised, greatly enlarged, and entirely reset. Handsome 12mo volume of 329 pages, fully illustrated, including four colored plates. Philadelphia, New York, London: W. B. Saunders & Company. 1903. [Cloth, $1.75 net.]

The International Medical Annual. A yearbook of Treatment and Practitioner's Index. Thirty-four contributors, American and Foreign. Twenty-first year. Octavo, pp. 750. New York and Chicago: E. B. Treat & Co. 1903. [Price, $3.00.]

American Edition of Nothnagel's Practice. Diseases of the Pancreas, Diseases of the Suprarenal Capsules, and Diseases of the Liver. By Dr. L. Oser, of Vienna: Dr. E. Neusser, of Vienna; and Drs. H. Quincke and G. Hoppe-Seyler, of Kiel. The entire volume edited, with additions, by Frederick A. Packard, M. D., late Physician to the Pennsylvania and to the Children's Hospitals, Philadelphia; and Reginald H. Fitz, M. D.; Hersey Professor of the Theory and Practice of Physic, Harvard University Medical School, Boston. Handsome octavo of 918 pages, illustrated. Philadelphia, New York, London: W. B. Saunders & Company. 1903. [Cloth, $5.00 net; Half Morocco, $6.00 net.]

American Edition of Nothnagel's Practice. Diseases of the Stomach. By Dr. F. Riegel, of Giessen. Edited, with additions, by Charles G. Stockton, M. D., Professor of Medicine in the University of Buffalo. Handsome octavo volume of 835 pages, illustrated, including 6 full-page plates, Philadelphia, New York, London: W. B Saunders & Company. 1903. [Cloth, $5.00 net; Half Morocco, $6.00 net.]

Practical Points in Nursing. For Nurses in Private Practice. With an Appendix containing Rules for Feeding the Sick; Recipes for Invalid Food and Beverages; Weights and Measures; Dose List; and a full Glossary of Medical Terms and Nursing Treatment. By Emily A M. Stoney, late Superintendent of the Training School for Nurses, Carney Hospital, South Boston, Mass. Third edition, thoroughly revised. Duodecimo of 458 pages, fully illustrated, including 8 colored and half-tone plates. Philadelphia, New York, London: W. B. Saunders & Company. 1903. [Cloth, $1.75 net.]

LITERARY NOTES.

THE *American Journal of Dermatology and Genitourinary Diseases*, published at St. Louis, Mo., proposes to devote its entire issue for May, 1903, to a symposium on modern prostatic investigation. The leading genitourinary surgeons will participate in the discussion, which will be arranged and presented in an original manner.

PROVIDENCE RETREAT, a private hospital for the insane, in Buffalo, conducted by the Sisters of Charity, has issued its 36th annual report. The capacity of the institution is 125 patients, and the daily average population for the year covered by the report, ending September 30, 1902, was 119 plus. The medical officers

are: William C. Krauss, medical superintendent; John J. Twohey, physician-in-charge; and W. J. O'Donnell, assistant physician.

New Books.—W. B. Saunders & Company, of Philadelphia, announce the early publication of the following:

The Vermiform Appendix and its Diseases. By Howard A. Kelly, M.D., and E. Hurdon, M.D., of Baltimore.

Myomata of the Uterus. By Howard A. Kelly, M.D., Professor of Gynecology, Johns Hopkins University, Baltimore.

A Textbook of Operative Surgery. By Warren Stone Bickham, M.D., Assistant Instructor in Operative Surgery, College of Physicians and Surgeons, New York City.

The Practical Application of the Röntgen Rays in Therapeutics and Diagnosis. By William Allen Pusey, M.D., Professor of Dermatology, College of Physicians and Surgeons, Chicago; and Eugene W. Caldwell, B. S., Director of the Edward N. Gibbs Memorial X-ray Laboratory, and University and Bellevue Hospital Medical College, New York City.

A Textbook of Obstetrics. By J. Clarence Webster, M.D., F.R.C.P. (Edin.), Professor of Obstetrics and Gynecology, Rush Medical College, in affiliation with the University of Chicago.

A Textbook of Diseases of Women. By Barton Cooke Hirst, M.D., Professor of Obstetrics, University of Pennsylvania, Gynecologist to the Howard, the Othopedic, and the Philadelphia Hospitals.

A Textbook of Pathology. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology, Medico-Chirurgical College, Philadelphia.

The Blood in its Clinical and Pathological Relations. By Alfred Stengel, M.D., Professor of Clinical Medicine, University of Pennsylvania; and C. Y. White, Jr., M.D., Instructor in Clinical Medicine, University of Pennsylvania.

A Thesaurus of Medical Words and Phrases. By Wilfred M. Barton, M.D., Assistant to Professor of Materia Medica and Therapeutics, and Lecturer on Pharmacy, Georgetown University, Washington, D. C.; and Walter A. Wells, M.D., Demonstrator of Laryngology and Rhinology, Georgetown University, Washington, D. C.

A Textbook of Modern Therapeutics. By A. A. Stevens, M.D., Lecturer on Physical Diagnosis, University of Pennsyl-

vania; Professor of Pathology in the Woman's Medical College, Philadelphia.

ITEMS.

To the American Medical Association.—The Queen and Crescent Route offers (see adv. page xxxvii.)to transport visitors to New Orleans on account of the meeting of the American Medical Association from Buffalo and return, for one fare. This is in accordance with the liberal arrangements of the Southern Passenger Association and should induce many physicians and their families to attend. It is not often in a lifetime that one can go so far and see so much for so little money.

Some of our readers no doubt will be interested to learn that the Oppenheimer Institute, in addition to its place in New York and branches in Philadelphia, Detroit and Pittsburg, has opened a branch at No. 2901 Pacific Avenue, Atlantic City, N. J. Physicians will doubtless prefer to have a considerable number of their patients go to Atlantic City for treatment, as they will there have the benefit of a most desirable climate and attractive and restful surroundings.

Merit and Reliability with Consequent Success.— The Antikamnia Chemical Company, for many years located at No. 1723 Olive Street, St. Louis, Mo., has moved into its new home, Nos. 1622, 1624, 1626 Pine Street, in that city. The new laboratory is fully equipped with all the latest chemical appliances and machinery, which afford increased and needed capacity for the manufacture of the well known and reliable antikamnia preparations. The company states that its sales during 1902 were the largest in the history of its business, and that the demand for its products is constantly growing, is demonstrated by the fact that the first three months of this year show a pronounced increase of sales over those of the corresponding months of last year. It is this growth of the business which necessitated the removal into larger quarters, where the company has 75 per cent. more space than in its old plant. This is a most satisfactory showing and indicates the prosperity resultant from merit and integrity applied to vigorous business principles.

AN INCREASE of the medical corps of the navy to the number of 150 was provided for by the last congress, 25 of which are to be appointed each calendar year for six years. Appointments are to be made in the grade of assistant surgeon from well qualified physicians, citizens of the United States between the ages of 21 and 30 years. Examining boards are in continuous session at Washington, D. C., and Mare Island, Cal. Applications should be made to the secretary of the navy, accompanied by testimonials as to moral standing and citizenship, no political influence being required.

FAIRCHILD BROS. & FOSTER have obtained another conviction for substitution, the guilty party in this instance being Walter L. Conwell, of Boston. The final decree in the case says:

That the defendant, Walter L. Conwell, his agents, servants and employes be, and they hereby are, perpetually enjoined from selling or dispensing either at the drug store of the said Walter L. Conwell, at No. 210 Shawmut Avenue, in the City of Boston, or elsewhere, any "Essence of Pepsine" or pharmaceutical preparation of any sort or kind whatsoever not manufactured by Fairchild Bros. & Foster, in imitation of or in substitution for "Fairchild's Essence of Pepsine" whenever "Fairchild's Essence of Pepsine" is prescribed or asked for, and that they be, and hereby are, perpetually enjoined from representing by any word or action that any preparation sold by the said defendant not manufactured by Fairchild Bros. & Foster is "Fairchild's Essence of Pepsine."

It is further ordered that a writ of injunction restraining the defendant as above set forth issue forthwith.

In this state a bill has just passed the legislature and only awaits the governor's signature to become a law, which will adequately punish such villainous procedures as resulted in the foregoing decree.

DEATH OF HON. JAMES O. PUTNAM.

AFTER the personal item, on page 770, relating to Mr. Putnam was printed, and just as this page enters the press, we learn that he died about 9 o'clock this (Friday) morning, April 24, 1903. Mr. Putnam was a member of the council from the foundation and for many years chancellor of the University of Buffalo, hence his death will be sadly felt by many physicians besides a whole community of citizens in general.

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ORIGINAL COMMUNICATIONS.

Provisional Hemostasis in Operations Upon the Head and Neck.[1]

BY GEORGE RYERSON FOWLER, M.D., Brooklyn, New York.

METHODS for securing provisional or prophylactic hemostasis in general may be divided into the following: (1) elevation of the parts; (2) direct pressure upon the source of arterial supply, either manual or by the application of the tourniquet; (3) elastic constriction; (4) permanent ligation of arteries in their continuity; (5) temporary ligation of main arterial trunks; (6) provisional arrest of the blood supply after exposure of the vessel, either by means of a special clamp, a traction loop, or a twisted tape or ligature.

In operations in the region of the head, the last four find an application to a greater or lesser extent. Elastic constriction, for example, is limited to operations upon the scalp; it is most efficient in this regard, however. For instance, in the removal of large angiomatous tumors in this region, radical operative attacks upon which are attended with considerable danger to life from excessive loss of blood, removal may be effected with the minimum amount of hemorrhage by the previous application of a constricting band or cord applied on a level with the occipital protuberance behind, and the upper margin of the eyebrows in front. Rubber tubing answers the purpose excellently. To prevent slipping during the operation four stout needles may be passed through the skin upon either side of the rubber tubing at points equidistant, and stout silk thread wound figure-of-eight fashion beneath the projecting ends of the needles and over the

1. Read by invitation before the Buffalo Academy of Medicine, March 3, 1903.

constriction, as in the application of the figure-of-eight harelip suture.

Provisional permanent ligature of arteries as an immediate pre-operative measure was brought forward by Pirogoff, in 1840, and again by Madelung, in 1874. It finds its applicability in the region of the head and neck, more particularly in operative attacks upon the tongue, in which the lingual arteries are ligated, in excisions of the superior maxillæ, in which the external carotids are secured, and occasionally in thyroidectomy. In 1894, I introduced preliminary permanent ligation of the external carotid for the purpose of controlling the hemorrhage in a case of intracranial neurectomy.[1] In this case the dangers arising from loss of blood were averted, and much time saved in the operation, although there was some oozing as the dura was lifted from the base. The point selected for the application of the ligature was between the occipital and the internal maxillary, in order to cut off the blood supply from the trunk of the internal maxillary with its middle meningeal branch, and to likewise prevent hemorrhage arising from the free anastomosis of the lingual, facial and occipital branches with the corresponding vessels of the opposite side. In this case the middle meningeal artery was injured in turning down the osteo-plastic flap, made in gaining access to the cranium. It was found, however, that almost no blood was furnished by this vessel. This was in striking contrast with an experience in a previous case, in which I am convinced that the patient's death was the direct result of the blood lost during this stage of the operation.

Preliminary ligature and excision of both external carotids precedent to radical operative interference in the area of these vessels has heretofore remained an unrecognised procedure in surgical practice. Nor is it likely to be employed save under the most exceptional circumstances. Even its justifiability must remain for the present subjudice. The operation of excision of the external carotids and their branches, as introduced by Dawbarn, has found its applicability exclusively in the attempts to "starve out" otherwise supposedly inoperable malignant neoplasms situated within the area supplied by these vessels and their branches. Yet it may happen in this class of cases, that a radical operation is subsequently indicated. This is exemplified by a case occurring in my service at the German Hospital, in Brooklyn, in a patient, suffering from carcinoma of the cheek

1. New York Medical Record, June 16, 1894, p. 746.

and upper jaw. When first admitted to the hospital his general condition was so unpromising, and the local condition so far advanced, that I despaired of being able to accomplish much for his relief, and contented myself with excising both external carotids, after Dawbarn's method.

A few weeks stay in the hospital following the operation, with proper food, greatly improved his general condition. The local disease likewise showed signs of apparent improvement. The area of what appeared to be carcinomatous infiltration upon the cheek lessened very materially, and the ulcerative process ceased to be active. It is to be presumed that what was supposed to be at first an extensive invasion of the cheek was largely due to edema. At all events, the temptation was strong, in view of both the general and local improvement in the condition of the patient, to embrace the reasonable hope of an assured cure, rather than await the final results of the Dawbarn operation. So strongly did I become impressed with this as I watched him from day to day, that, after weighing carefully the chances of failure of the reparative process incident to cutting off the circulation so completely with its consequent nutritive disturbances, I finally decided to remove the upper jaw and the involved soft parts. This was done four weeks following the first operation. The operation was as bloodless as it very well could have been upon the living subject. No vessels required the application of a ligature, yet there was a sufficient amount of oozing from the incised parts to encourage the belief that repair would take place. The resulting gap in the cheek, at first not less than two and a half inches in diameter, was reduced by sliding flaps to about half that size.

The after history of the case was entirely uneventful so far as concerns the healing process. The incisions made for the sliding flaps closed by primary union, and granulating surfaces, followed by a covering of cicatricial formation, completed the repair of the raw surfaces left by the mucous membrane and bone sections. The further care of the case resolved itself into plastic replacement of the removed soft parts of the cheek, which was first attempted by a flap taken from the arm as in the old Taglicotian operation of rhinoplasty, the skin surfaces of the flap being turned in so as to prevent undue shrinkage, and at the same time serve as a substitute for the mucous membrane lining of the cheek. This was done four weeks after the original operation, delay of at least this length of time being deemed

essential in order to obtain a sufficient blood supply from the edges of the defect, to insure union of these with the transplanted flap.

It is of interest in connection with our subject to discuss the final fate of the flap in this the first attempt at repair. Unfortunately, the flap itself failed to retain sufficient vitality to accomplish a result. At least two-thirds of the flap sloughed, only a comparatively narrow portion near the pedicle surviving. Wherever the flap itself did not break down, however, its edges became united to those of the defect, thus demonstrating, as had been already shown by the readiness with which the parts healed after the radical operation, that the previous excision of both external carotids need not necessarily contraindicate subsequent removal of the diseased parts, and may even have some advantages, such for instance, as holding the disease in check pending the building up of the patient, to say nothing of the complete and absolute control of the circulation in the parts for the purposes of the radical operation.[1] It is true that ligation of both external carotids will answer the last named purpose reasonably well, and therefore it is probable that, if excision of both external carotids as a preoperative measure finds a place in surgical practice at all, it will be in the class of cases of which the one herewith related is an example—namely, cases of malignant disease in this region in which the patient's general condition will not permit of operation with a reasonable assurance of success, and yet in which delay is fraught with grave danger of placing the case among the positively inoperable ones.

Temporary occlusion of the common carotids, constriction being applied sufficiently tight to occlude the vessel, and yet not injure the intima, has been in use for a number of years. I am sure that many surgeons, like myself, have taken the precaution to slip a loose ligature around the common carotid when this vessel had been laid bare in the course of a deep and extensive dissection of the neck. From this it was but a step further to make traction upon the ligature so placed to temporarily occlude the vessel and thus permit the dissection to go on unhampered by flow of blood. Such at least has been my practice for the past eighteen years.

It was not, however, until Schonborn called attention to the matter before the International Medical Congress in Rome by

1. This patient died of pneumonia before the work of plastic replacement of the cheek was completed.

the exhibition of an instrument designed to compress the carotids, that interest in the subject was awakened. Schonborn's contribution was followed in 1895 by the practical work of Senger, of Krefeld.[1] This in time was followed by Riese's report of two cases of resection of the upper jaw with temporary occlusion of the carotids.[2] To Dr. George W. Crile[3], of Cleveland, however, should be accorded the credit of having, in a convincing and practical manner, called renewed attention to the practicability of temporarily closing the carotid arteries for the purpose of controlling hemorrhage in certain operations upon the head and neck.

In carrying out the procedure of provisional occlusion of the carotids, thereby arresting the greater portion of the blood supply to the head, three considerations impel the surgeon to carefully weigh the measure before resorting to it. These relate, first, to the effects upon the important organs contained in the cranial cavity of depriving these of their normal blood supply for the length of time required for the operation; second, to the possibilities of the formation of coagula and the subsequent passage of these into the cerebral vessels by the restored blood stream; third, to the injurious effects of the pressure upon the arterial coats. The first two of these are of especial importance in connection with the immediate effects of "turning off" the blood stream, as it has been called. The last does not involve immediate danger to life, nor are its effects, either immediate or remote, greater when applied in this region, than when applied elsewhere.

The effects of the diminished blood supply upon the intracranial organs may be said to be practically nil, so far as our present knowledge goes. In Crile's studies, which embraced its effects upon the circulation and respiration, it was found that the blood pressure was raised at first, but the normal was soon restored by physiologic compensation. The respiratory action was decreased as the most constant of the phenomena observed, and yet this was not marked in any of the animals experimented upon. In fact, as remarked by Crile, "in no instance was there any striking results noted." It would, therefore, seem that the vertebrals are amply sufficient to carry on the circulation in the intracranial organs, so far as any knowledge of untoward effects

1. Deutsche Med. Wochenschrift, 1895, No. 22, p. 160.
2. Die Thrombose nach Versuchen und Leichenbefunden. Stuttgart, 1888.
3. Problems Relating to Surgical Operations. Philadelphia, 1901.

derived from animal experimentation, or from observations upon patients under an anesthetic, can throw light upon the subject.

It is true that compression of the carotids has been employed for therapeutic purposes in past years, and the occurrence of such symptoms as dimness of vision, vertigo, staggering gait, loss of consciousness, and even apoplectic seizures, has been attributed to the compression. Other observers have added to these dilatation of the pupils and convulsions. The want of uniformity in the results obtained in these bloodless attempts to compress the carotids on the one hand, and the absence of all untoward effects following definite and direct occlusion as exercised after exposure and isolation of the vessel, upon the other, lead to the conclusion that the symptoms attributed to compression of the carotids were really due to other causes, such as pressure upon the vagi, the jugular vein, or even upon the cervical sympathetic. The view that the effects produced were due to compression of the sensitive nerves prevailed in the age of Rufus, of Ephesus, one of the few anatomists, according to Park, mentioned by Galen. This view was also held by Galen himself.

In commenting upon the absence of marked decrease in the respiratory action in Crile's experiments, the details of the first of the eleven cases of the application of the method to the human subject should be taken into account. In this the respiration suddenly failed and artificial respiration was resorted to and continued for twenty-five minutes. The case was one, however, in which a large fibrosarcoma filled the mouth, and in which breathing was obstructed to the extent of threatening suffocation. A preliminary tracheotomy under cocain had been performed in the case. The respiratory failure took place ten minutes after the completion of the operation. The wound had been dressed and the entire cavity of the mouth packed with iodoform gauze. The patient finally recovered. Crile does not attempt to explain the failure of the respiration in this case. There does not seem to have been any obstruction in the tracheotomy tube, nor is there any statement made as to the condition of the circulation at the time of the respiratory failure.

As to the possibilities of the formation of coagulæ, and the passage of these into the cerebral vessels through the restored blood stream, it may be said that the occurrence of such an accident will depend entirely upon the care exercised in produc-

ing the occlusion. It was formerly supposed that the mere arrest of the blood at the point of obstruction was sufficient to cause the coagulation. It has been shown, however, by Alexander Schmidt, that coagulation under these circumstances is due to a ferment having its origin in the so-called blood plaques. The disintegration of the blood plaques is initiated by injury to the coats of the vessel; this disintegration, in its turn, sets free the fibrin ferment, following which coagulation of the blood at the site of the injury takes place. It would therefore follow that, if injury to the vessel walls can be avoided the dangers from this source may be escaped. The problem therefore resolves itself into some means whereby the pressure of the occluding instrument can be so regulated as to arrest the blood stream without making sufficient pressure upon the vessel to injure its walls. For this purpose Crile uses a special clamp, the jaws of which are approximated by a screw-device. When the vessel is closed the jaws of the instrument are parallel to each other. The effect of the contact of the metal with the vessel is modified by pieces of rubber tubing drawn over the jaws. This device of Crile's no doubt answers the purpose well, the adjustable set screw giving perfect control of the lumen of the vessel. He employed it in eleven cases, in all of which the instrument seems to have given entire satisfaction.

As to the third consideration—namely, that of permanent injury to the vessel itself, but very little need be said. The necessity of avoiding such injury is paramount from the fact that the immediate result of this would be the occurrence of coagulation, followed by embolic plugging of the cerebral vessels and resulting suspension of function of important intracranial organs, or even irreparable damage to the latter.

My own experience with temporary carotid occlusion is limited to two cases, one a case of gunshot wound of the neck, and the other an intracranial neurectomy. In the first case secondary hemorrhage took place on the sixth day, and was held in control by my house-surgeon at the German Hospital until my arrival, by firmly packing the wound track. The missile had entered from the direction of the cavity of the mouth, and septic conditions were present almost from the start. Without removing the packing from the wound tract, I exposed the common carotid above the omohyoid and passed two ligatures around the vessel, one of which was carefully twisted until pulsation above the ligature ceased; the other was simply clamped

and held in readiness to serve as a permanent ligature should this be required in an emergency. The track of the bullet in the neck was then exposed and the blood stream turned on by untwisting the ligature. The source of the hemorrhage was then identified as the facial artery, which was easily secured. The occlusion of the common carotid was then discontinued and the wound made for its exposure sutured.

Six days later another hemorrhage took place. The carotid was again exposed by reopening the original wound, and temporarily occluded at the same point. The bleeding this time came from the direction of the inward distribution of the ascending pharyngeal branch of the external carotid. Repeated attempts to secure the vessel at the site of the bleeding proved futile. As the septic condition of the tissue in the neighborhood of the origin of the external carotid rendered the attempt to apply a ligature to the latter unsafe, I therefore proceeded to ligate the common carotid at once. In view of the possibilities of further hemorrhage through anastomosing vessels from the external carotid of the opposite side, the latter was also ligated. No disturbances from the provisional occlusion of the common carotid upon the occasion of the first operation occurred, and the patient finally made a complete recovery.

The second case occurred at the Methodist Episcopal Hospital. The patient, a man of 56, had suffered for many years from neuralgia of the 3d division of the fifth nerve of the left side. Two years ago I resected the nerve external to the cranial cavity at the foramen ovale, turning down a flap including the zygoma for the purpose. Upon his re-admission to the hospital he complained of pain in the distribution of the 2d division of the fifth nerve. His vessels were markedly atheromatous, and he presented the appearance of a much older man than his years would suggest.

On February 3, of the present year, I performed intracranial neurectomy after Abbe's method, first exposing each common carotid artery in turn and occluding it by passing a ligature about it and twisting the ends until the resulting loop constricted the vessel sufficiently to arrest pulsation. The main operation was then proceeded with, and proved the most satisfactory of its class that I have ever performed. Bleeding there was practically none, and because of this the Gasserian ganglion was quickly identified and the intracranial portions of both the 2d and 3d divisions divided close to the foramina and removed.

After placing a piece of rubber tissue over the foramina, which could be plainly discerned, the spheno-temporal lobe was replaced, a strip of iodoform gauze led from the opening of the skull to the lower angle of the wound, and the remainder of the latter closed. The provisional occlusion was then removed and bleeding watched for. None occurred.

During the operation the brain was held in a direction directly upward by an elevator with one of the miniature "cold" electric light bulbs furnished by the Surgical Appliance Manufacturing Co., of Rochester, attached. Great assistance was afforded by this instrument. During the operation nothing noteworthy occurred. The anesthetic used was chloroform. The respirations continued even and normal throughout. The pupils did not undergo any especial changes, and the heart's action was not disturbed in the least at any time.

The after history of this case is of interest as bearing upon the method of producing temporary occlusion of the carotids. Upon the day following the operation it was discovered that the patient had developed sensory aphasia. He was at a loss to employ certain words in replying to questions, but when these were supplied to him he would make use of them in their proper relation to the remainder of the sentence. This condition gradually improved, but had not disappeared altogether when he left the hospital twenty-four days after the operation. At this time the aphasia was principally manifest when he attempted to write a letter to his wife. In all other respects he appeared to be in perfect health.

The occurrence of aphasia is, of course, the point of especial interest in this case. That some lesion occurred in the pars opercularis, or region of Broca during the operation is very evident, but whether from a dislodged thrombus, which, when the force of the blood stream was released was driven into the branch of the middle cerebral, which supplies the anterior lobe, or from some injury inflicted by the elevator in lifting the central mass is not entirely clear. The patient's vessels were in a markedly atheromatous condition, and for this reason I was especially careful in applying the constriction, for I felt that, with excessive brittleness of the vessel walls, a pressure more than sufficient to arrest the pulsation in the vessel beyond the constriction might easily so disturb the integrity of these as to lead to the formation of a thrombus. It is probably true that occlusion brought about by circular constriction is more likely

to inflict injury upon an atheromatous vessel than when simple flat pressure is employed, and in the future I would use a flat clamp with set-screw adjustment after the manner of Crile, in such a case. As to the pressure applied to lift the cerebral mass from the base, I can only say that this was no greater than I have employed previously upon a number of occasions, and no such accident occurred. In any event I do not feel that I shall be deterred from employing the method in future cases by this occurrence; on the other hand, I am quite convinced that too much stress cannot be laid upon the importance of exercising every care to avoid injury to the vessel.

Through the kindness of Prof. Roswell Park, I was permitted to perform intracranial neurectomy for the relief of intractable facial neuralgia before the class at the Buffalo General Hospital upon the morning of the day upon which this paper was read.

Provisional hemostasis was secured by temporary occlusion of both common carotids. There was considerable venous oozing as the cerebral mass was lifted from the base, and particularly as the 2d and 3d divisions of the fifth nerve were isolated at the foramina and divided.

In the discussion which followed the reading of this paper, Prof. Park called attention to this circumstance and stated that the explanation suggested by his service assistant, Dr. McGuire, was probably the true one—namely, that the internal jugular was more or less pressed upon by a small compress that was placed in the bight of the constricting tape to serve as a cushion to prevent injury to the artery as the former was twisted. This pressure was somewhat increased by the weight of the forceps which were clamped upon the tapes to prevent untwisting, and which were allowed to hang down and thus drag the little cushions of gauze in the direction of the vein. The remedy for this is to employ a special clamp, such as Crile recommends, for occluding the vessel. In the absence of such a special device interference with the return circulation, which is certainly a most important consideration, may be prevented by passing the clamp which secures the constricting band or ligature upon the right side across in front to the left side, and the one from the left to the right side. In this manner the constricting ligature with its cushion, if the latter be employed, together with the carotid itself, will be drawn away from the vein, and pressure upon the latter avoided.

No untoward circumstance seems to have followed the occlusion of the carotids in this case. In a letter from Prof. Park received a fortnight following the operation, he states that the patient is free from pain and would soon return home. He had a rather sharp secondary hemorrhage from the scalp on the afternoon of the operation, but this was easily controlled. A few days later he had a discharge from the opposite ear, which soon subsided. At the time of writing he had a purulent discharge from the left nostril, probably, as stated by Prof. Park, from the antrum.

It is difficult to trace any pathological connection between the operation and these post-operative complications. This relates to both the intracranial neurectomy and the provisional occlusion of the carotids. It is barely possible that the circulatory disturbances incident to the latter may account for them, although just in what manner is not at the time of writing at all clear.

301 DeKalb Avenue.

Stimulation.[1]

By ELI H. LONG, M.D., Buffalo, N.Y.,
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THE perennial interest in whatever pertains to emergency measures justifies an occasional reconsideration of our ideas of so important a subject as stimulation. In attempting a definition of the term we meet with difficulties that have increased with more exact knowledge of physiology, for it has been found that certain changes produced by agents credited with stimulant properties are primarily and essentially depressant; and, on the contrary, certain sedative effects upon organs may be the physiologic effect of a true stimulation. It is difficult to restrict the term to the simple idea of excitation of an organ to increased functional activity; *i. e.*, stimulation in a physiologic sense. And, on the other hand, it seems improper to permit the secondary effects alone to determine what shall be regarded as stimulation. It is largely a question of reconciling physiologic action of drugs with their apparent clinical effects.

In order to illustrate the difficulties, let us take two well-

1. Read before the section on medicine, Buffalo Academy of Medicine, February 10, 1903.

known drugs, aconite and alcohol. Aconite is regarded as a typical heart depressant, as judged by its effects, as it at once slows and weakens the heart's action. But it is found that these effects are secondary, being brought about by the stimulation of the inhibitory vagus center in the medulla, which results in a restraint of the action of the heart and a relaxation of its muscular tone. It might be entitled to be called physiologically a stimulant, but clinically it must be regarded as a sedative. On the other hand, alcohol, judged simply by its apparent effects, has held a prominent place as a stimulant, but experimental evidence goes to show that certain of the apparent stimulant effects, such as hilarity and garrulity, are really due to a removal of the restraint of the controlling cerebral functions by the depressant action of the drug.

There is likely to be for some time to come conflicting opinions held by physiologists and pharmacologists on the one hand, and clinicians on the other, concerning the true place of this and some other substances, but a final agreement must be possible if we approach the matter as we ought any scientific question that requires observation, experiment and unprejudiced deductions from observed facts, for its solution.

In order to clear away inherited or preconceived views for the time being, let us question whether we should use the term stimulation as meaning always a single definite and invariable kind of influence or phenomenon. Let us be prepared to recognise a restricted physiologic meaning of the term and possibly also a broad clinical meaning, based upon the complex results of the action of remedies as observed in disease.

In the study of the practical values and uses of remedies we employ several related terms which are too often confused. Physiologic action, physiologic effect and therapeutic effect are terms distinct in meaning, and they should be properly understood. The action and the effect of a drug cannot be the same. The action may be obscure; the effect must be apparent. The action of a drug consists of a modification of conditions, chemic, thermic, electric, or structural, which determines an alteration of function. This alteration, when apparent, is known as the effect of the drug. Within the limit of normal function this effect is physiologic, while an alteration beyond the normal is a toxic effect. Therapeutic effect means an alteration that relieves a symptom or condition of disease, and presupposes a pathologic state.

In the analysis of the physiologic action of stimulants in the laboratory, we are dealing chiefly with an increased irritability of cells, or with a more ready discharge of their peculiar power. There is this objection to calling either of these factors stimulation—the physiologist is not working in the proper field of stimulation. He is using tissues in as nearly normal condition as possible. In order to develop this thought we must appreciate the limitations of stimulation.

The indication for employing stimulants is, in general, any depression of a function to a degree that may be regarded as below the physiologic minimum of its activity. We recognise that every organ has a certain range of action that may be called physiologic, within which it reacts to the work demanded of it, by increasing or lessening its activity. Functional activity, therefore, is a variable quantity, influenced on the one hand by the strength and nutritive resources of an organ, which are opposed on the other hand by the amount of work imposed upon it. The physiologic minimum of activity, therefore, must vary as modified by these influences; but it may be defined to be the minimum of efficiency of a function under existing conditions. Now as long as an organ is working efficiently within its physiologic range it needs no stimulation. But when, either from its own inability or from excessive demands made upon it, its activity falls below its physiologic minimum, then stimulation may be employed to compel an extra expenditure of energy in enforced activity.

It is, moreover, observed that normally-acting organs do not show much response to stimulants, but that those whose action is deficient respond well. When an organ is doing all the work that is required of it, it is difficult to force its action; but when a need of increased work is present and a stimulant is applied, there appears to be a coöperation of influences, the increased irritability or the more powerful impression contributed by the applied stimulant enabling the organ to respond to the need of increased work, which, after all, is its normal stimulus.

The physiologist, therefore, is studying biologic reactions which are made to serve the need of stimulation only in abnormal conditions. The classic definition of a stimulant is—an agent that increases the activity of a function. If we turn to the clinical side of the question we must at least qualify this statement by stating that we seek not always rapidity, but always efficiency of a function. With this as a goal, it must appear

that we are seeking to secure effects rather than precise medicinal action. In one case efficiency of a function will be secured by temporary rest; in another by restraint; in another by removal of restraint; in another by increasing reserve power; in another by positive stimulation of an organ. Herein lies the difficulty of a scientific use of the term in its broad sense. But inasmuch as we are not yet prepared to discard it, let us attempt to understand how our desired therapeutic effects are brought about.

In the regular exercise of most functions in the living body four factors are potent: (1) reserve energy; (2) irritability); (3) activity or discharge of power; (4) restraint or inhibition.

Assuming that reserve energy is sufficient, an increase of the efficiency of a function may be secured by modifying any one of the three other factors. There may be a diminution of reserve power, by reason of hemorrhage, damage to blood and tissues by poisons either from without or from within the system, or from various other causes. Here, whatever contributes to a restoration of the nutritive qualities of the blood and the volume of fluid in circulation will serve our purpose. It is often observed after hemorrhage that the restoration of volume by hypodermic or intravenous use of normal saline solution will produce a much better action of the heart. Several factors may be concerned in producing this result. Better filled vessels mean a better nourished heart; better distention of the ventricles with fluid calls forth a better contraction; while the saline itself may increase the irritability of the heart muscle. The effect is not purely a stimulation, for we are contributing not only to functional activity but to reserve power as well.

The following illustrations of drug action as related to improvement of the circulation are given:

First, strychnin acts chiefly by increasing the irritability of nerve tissues. It does not cause the discharge of power but makes the reflex center more responsive to normal stimuli. It might therefore be called a potential stimulant. Even in poisoning by strychnin the convulsions do not originate independently of external stimuli, as is indicated by the fact that they do not occur in a strychninised frog, when the surface of the body has been previously cocainised in order to prevent the stimuli being carried inward from the surface. Herein lies the superiority of strychnin as a general stimulant—that it does not cause an exhausting discharge of power. It simply places the nervous

system and possibly the muscles in a more responsive condition to the needs of functional activity. Its application is apparent in such diseases as pneumonia, diphtheria and typhoid fever, where stimulation is desired without exhausting either reserve energy or irritability. Digitalis, in moderate doses, probably also acts by increasing the irritability of the heart muscle, without causing much extra discharge of energy.

Second, another kind of stimulation is that which increases activity by causing either more frequent or more violent discharges of energy in the line of the particular function affected. Thus, the heart will respond to any considerable irritation of sensory nerves by whatever agent produced. Pain will often induce a rise of arterial pressure. Irritation by the faradic current will give the same result. Stimulation of this nature is brought about in an indirect or reflex manner. The so-called diffusible stimulants, such as alcohol and ammonia, probably induce much of their effect in this way, being diffusible in effect, rather than in action. In the relation of their physiologic action to reserve energy they may be regarded as kinetic stimulants, in that they cause a more rapid change of reserve into kinetic energy. Caffeine, and drugs of the digitalis group, in full doses, belong to this class, caffeine causing a more rapid heart action and digitalis more forcible contractions. By causing an increased discharge of energy these agents tend toward exhaustion and their abuse must always be guarded against. They have in their excessive action the possibility of defeating the very end sought to be gained by stimulation. Before employing kinetic stimulants, the question should always be raised whether their temporary value will compensate for the extra demand they make upon the reserve energy; and it is plain that their continuous use must be carefully supervised.

Third, the action of those agents that produce a stimulant effect of a certain kind by paralyzing or depressing inhibition, is very interesting. Atropin and glonoin are the typical drugs of this class. Their essential action is a depression of the vagus influence upon the heart, whereby the accelerator influence becomes relatively prominent, with an increase of the pulse rate. They differ in action in two respects; glonoin paralyzes the vagus center in the medulla, while atropin paralyzes its cardiac terminals, the effect upon the heart being the same; and, peripherally, their circulatory effects are opposite, glonoin inducing dilatation of arterioles by a direct paralyzant action upon their muscu-

lar coat, while atropin causes primarily a constriction of arterioles by central vaso-motor stimulation. Any direct stimulation of the heart by either is uncertain. As circulatory stimulants, the value of atropin must depend upon its power to slightly raise arterial pressure and that of glonoin upon the freer capillary blood supply which it induces. From the standpoint of physiologic action glonoin cannot properly be classed as a stimulant, as its action is essentially paralyzant, although we rank its effects as most valuable in increasing the peripheral blood supply in suitable cases. Atropin has a definite stimulant action upon centers in brain and medulla, therefore in its general influence it may be called a central stimulant and a peripheral depressant.

From the viewpoint of clinical results we usually seek by stimulation to secure one or more of the following: (1) more efficient heart action; (2) increase of arterial pressure; (3) better blood supply to the capillary areas.

And most of the cases that need circulatory stimulation naturally divide into three classes: (*a*) those in which cardiac irritability of activity is interfered with by intoxications of various kinds; (*b*) those in which serious valvular disease prevents compensation without aid; (*c*) those in which arterial sclerosis is antecedent to myocardial failure.

The keynote of treatment in the first class is elimination, and our stimulating measures must be in accord with this.

In the second class the chief needs are temporary rest to the heart, with maintenance of its nutrition. Our stimulation must respect these needs.

In the third class the great need is to promote cellular nutrition throughout the body, heart included. This demands a more efficient blood-supply in the capillary areas, with corresponding increase in oxidation and elimination. Any stimulation employed must have chief regard for the peripheral needs. Drugs that constrict the arterioles are contraindicated, unless they are so combined as to remove this factor in their action.

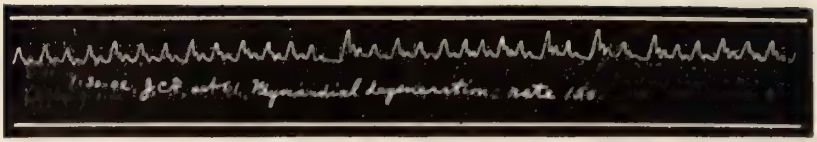
The wise choice of agents in these differing conditions constitutes a very important part of our therapeutic art. It is not enough, when a heart showns signs of failure, to order whiskey or digitalis as an easy routine. It may be the worst practice possible.

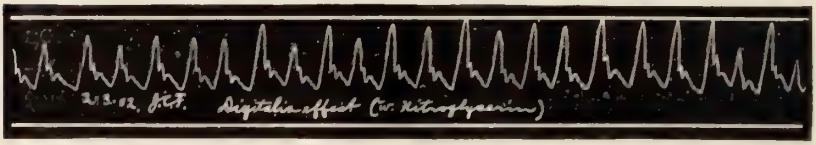
In connection with our subject it will be appropriate to con-

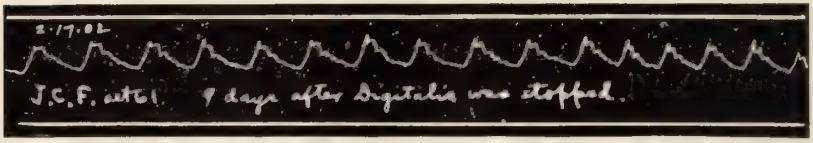
sider also some features of drug application as affecting the use of several of the more commonly used stimulants.

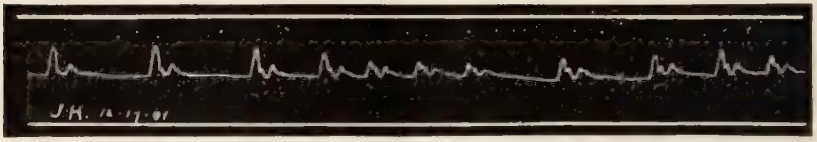
To consider, briefly, the place of alcohol as a stimulant, we must admit that we face the difficulty of uncertainty as to its action after absorption. We can understand that it may induce temporary reflex stimulation through its local irritant action upon the mucous membrane, just as will the irritation of sensory organs by faradism. However, observations as to such action in dogs do not show any very decided results, as the blood pressure tracings will indicate. Arterial blood pressure is not increased as a rule, and the pulse rate is only slightly and temporarily quickened. Moderate quantities of alcohol have no pronounced effect upon either the power or rate of the cardiac systols, while full doses weaken the auricular contraction decidedly and the ventricular contraction in lesser degree. (Cushing). Its action upon the arterioles is indefinite. It is usually classed as a vasodilator and this effect is apparent when large doses are taken, but is not commonly observed with moderate doses. Prof. Atwater has assured me that in his calorimetric experiments with men taking moderate quantities of alcohol, he has not observed flushing of the skin. Notwithstanding these observations some clinicians assert its stimulant effects upon the circulation. In the face of these differences let us again be reminded of the distinction between physiologic action and clinical effect. In the observed therapeutic effects of alcohol several factors may be involved. Since the influence of inhibition as a factor in producing a depressed state of the system is admitted, it may be argued that the useful effects of alcohol are partly due to its power to weaken inhibition, thus permitting greater activity of certain functions.

A drug that deserves most careful study as to its action and its therapeutic effects is digitalis. The complexity of its action easily obscures the features of greatest importance. Contraindications to its use are accordingly disregarded and its untoward effects poorly appreciated by many practitioners. Its threefold action may be stated thus: (1) it stimulates the heart directly, either by increasing muscle irritability or by calling forth more violent discharges of power in activity, or both; (2) it causes contraction of the arterioles by both local and central vasomotor stimulation; (3) it slows the heart's action by stimulating the vagus inhibitory centers in the medulla.









Normal – 84 per minute.

after nitroglycerin – 96 per minute

Whenever digitalis is indicated its direct stimulant action is always desired. Its inhibitory stimulant action may be desired, while its vasoconstrictor action is often positively harmful. Its stimulant action upon the kidneys is uncertain, although it is found that with dogs a pure digitalin, in large dose, positively lessens the secretion of urine. It is generally accepted that the whole drug has a diurectic effect in certain cases through the rise of arterial pressure which it induces.

The several modes of action of digitalis are too often regarded as of equal prominence and importance. We ought to rate its first effect, that of direct heart stimulation, as its best effect; and we may usually have this action of the drug from moderate doses, while any marked slowing of the heart is a later effect, often scarcely seen except with large doses. One tracing here shown gives an actual increase in the pulse rate under digitalis. There may be varying indications for securing an altered rate of the pulse, as in some cases of aortic incompetency and mitral stenosis; but, according to Cushing, the inhibitory stimulation not only slows but relaxes the muscular fibers, and weakens systole. This statement is supported by bringing into comparison the effects of aconite, which has precisely the same inhibitory stimulant action as digitalis without any direct effect upon the heart, the result being slowing and relaxation of the organ.

The vasoconstrictor action is the part of the drug's influence that is most frequently undesirable. A close study of the relation of arterial sclerosis primarily to nutrition in the capillary areas and secondarily to nutrition of the heart, will convince one of the supreme importance of good reactive power in the muscular coat of the smaller blood vessels. By reactive power we mean the ability to either dilate or contract easily as the needs of the capillary system requires. Theoretically, we suppose that in arterial sclerosis this power of reaction is much reduced, and that cellular nutrition suffers accordingly. In the use of digitalis in the third class of cases previously mentioned, the vasoconstrictor action may, therefore, interfere with the already diminished power of reaction in the arterioles to such a degree that autointoxication may be favored and our purpose in medication defeated. In many of these cases it is imperative to remove the vasoconstrictor action of digitalis when this drug is employed. This can be done by combining it with one of the nitrites, either glonoin or sodium nitrate.

Another frequent advantage of such a combination is the removal or diminution of the inhibitory influence which may be relatively too prominent, because of the diminished irritability of the heart muscle; for either faulty nutrition or myocardial degeneration may reduce the muscle irritability and give us the slow heart, so frequently met with in advanced life which is doubtless a frequent cause of sudden death. The fact of loss of muscular irritability in old hearts will bear emphasis and will often modify our treatment.

1335 Main Street.

Blood Examination in General Practice.[1]

By IRVING PHILLIPS LYON, M. D., Buffalo, N. Y.

FIRST, I wish to express my high sense of appreciation of the honor done me by the officers of your ancient and honorable body by their invitation to me, a non-member, to address you. Your President suggested that the treatment of the subject assigned to me be practical and suited to the interest of the general practitioner rather than the pathologist or specialist in hematology, for which suggestion I was glad, as it permitted me to speak at all on this occasion. For I had no new discovery to announce to the pathologist, and though this would apply as well to the practitioner of medicine, yet I trusted to his greater leniency of judgment, as at least I should be a no worse offender in such respect than most others who read papers at general medical meetings. Though, therefore, I shall say nothing that has not been said before, I shall try to convince some skeptic amongst you, perchance, of the real utility of blood examination in the daily practice of his profession. For, in spite of all that has been spoken and written on this subject, it is true that the profession at large still have only slight familiarity with blood examination as a method of diagnosis.

I have drawn from my personal experience, in private and hospital practice, the following few cases which I have selected to narrate, with all possible brevity, for the purpose of giving concrete examples of the value of blood examination in determining diagnosis and thus rational treatment, whether medical or surgical. By this I do not intend to imply that blood exam-

1. Read by invitation before the Medical Society of the State of New York at its ninety-seventh annual meeting, held at Albany, January 27–29, 1903, being part of a symposium on hematology.

ination was the exclusive means of settling the diagnosis, but that it was an important, sometimes an essential factor among all other possible means of information in determining the diagnosis. For all available means of obtaining light on a case were invariably adopted and the blood was merely one, though an important one, of such means. And I would expressly state my conviction that a blood worker of any merit must be an even better clinician than hematologist, neglecting no sign or symptom and carefully correlating all the facts of a case before reaching a judgment. For one person must ultimately make the diagnosis and assume responsibility for it, and that person must combine the experience and matured judgment of both the clinician and the hematologist in order properly to correlate the whole evidence. The failure to recognise this principle has been the cause of much of the misunderstanding and discredit of blood reports and diagnoses based thereon.

I shall limit my remarks to citing only a few instructive cases, as examples, and to commenting thereon and perhaps on a few practical points of general interest in clinical blood examination.

Central Pneumonia, Obscured by Pleural Effusion.—This case occurred in my private practice in November, 1901, in a woman, Mrs. H., aged 75 years. The onset was sudden with chill and pain in the left side behind, following exposure to cold. The symptoms were those of pneumonia or acute pleurisy. The physical examination of the chest was almost negative and remained so until the end of the second day, when slight percussion dulness began to appear at the left base behind, without tubular breathing or râles. There was no expectoration. Next day friction sounds were heard over the relatively dull left base without other changes. On the fourth day flatness and positive physical signs of fluid were obtained and about 600 c.c. of clear serous fluid were aspirated. No tubular breathing or characteristic râles were then present. Was the case, then, one of simple acute pleurisy with effusion? No, it was a case of atypical pneumonia complicated by serous pleurisy, as made probable by the blood examination, which showed a high leucocytosis (35,000) even on the first day. The blood was examined daily and the leucocytosis persisted, with a relative increase of the neutrophiles, an iodine reaction in the leucocytes and a marked increase of fibrin deposit. I told the family, at first, my belief that the case was one of pneumonia, because the blood indicated it in spite of the negative physical signs. Not until the seventh day did tubular breathing and signs of pneumonic consolidation appear. By the next day, however, the process had extended and involved the entire left lung, which was solid and

flat from top to bottom, with intense tubular breathing and râles over it everywhere. The patient died on the eleventh day.

Was not the blood examination of value in this case? It is in cases in which pneumonia is suspected and cannot be determined positively by other means that the blood offers assistance. By means of examination of the blood acute serous pleurisy and influenza can usually be differentiated from lobar pneumonia. Besides the usual leucocytosis I have found a positive and marked iodine reaction in the leucocytes in all cases of pneumonia, and I have come to regard this reaction of distinct value in the diagnosis of atypical cases.

Pelvic Abscess.—Mrs. D., seen with Dr. Herman E. Hayd at the German Deaconess Hospital, in September, 1899, had developed a septic temperature two weeks after the birth of her baby. This had continued for about one month in spite of repeated uterine curetting and douches. It seemed that the symptoms depended on a further cause than the slight uterine inflammation with its free drainage and active treatment. The blood examination showed 40,000 leucocytes, a relative neutrophilia, an increase of fibrin and a marked secondary anemia. The blood examination was distinctly in favor of abscess, and examination and operation, a few days later, located a pocket of pus between the uterus, bladder and omentum.

Perinephritic Abscess.—L.B., a boy of 8 years, I saw with Dr. Lorenzo Burrows about two years ago. He had been running an irregular temperature with an occasional slight chill for a few days, and had been seen in consultation by several physicians. Various possibilities of diagnosis had been considered, especially typhoid fever, malaria and tuberculosis. After a few days it was noticed that the boy lay in bed with his left thigh slightly drawn toward the abdomen and that deep pressure in the left flank caused him to wince. The urinalyses were negative. After about ten days of slight and indefinite symptoms, I was asked to examine the blood and found 33,000 leucocytes, the neutrophiles in excess, and a marked increase in fibrin. Upon inquiry as to the signs and symptoms of the case, I obtained the information already stated, and that appendicitis, pneumonia, empyema and pericarditis had been excluded, and further that nothing could be discovered except the slight tenderness in the left flank on deep palpation, the voluntary flexure of the left thigh and some discomfort to the patient when the thigh was actively or passively extended. In view of the blood picture, which was that of active inflammation, and of the localising symptoms described, I made a diagnosis of "deep-seated abscess in the left side, probably perinephritic." Two

days later this diagnosis was confirmed by operation and by the discovery of about half a teaspoonful of pus behind the left kidney. The boy made a prompt recovery.

Who would deny the value of the blood examination in this case? Without it, days, perhaps weeks, might have passed before the diagnosis had become clear, and in the meantime serious damage to the kidney and other organs might have occurred.

Appendicitis.—Miss M. N., about 19 years of age, had been taken with nausea and vomiting while at dinner two nights before my examination. Fever, a coated tongue and diarrhea followed, with a little tenderness in the lower part of the abdomen, not sharply localised. Most of these symptoms subsided and the patient felt rather comfortable on the second day, a slight temperature, however, continuing. A very thorough examination of the appendix by Dr. D. W. Harrington, the physician in charge, and Dr. Matthew D. Mann, in consultation, at 4 o'clock on the afternoon of the second day, failed to reveal any positive signs of appendicitis, and it was thought that appendicitis probably did not exist. For caution's sake, however, a blood examination was considered advisable, which I made in the early evening of the same day, with the result that 20,000 leucocytes, a relative neutrophilia, an intracellular iodine reaction and an increase of fibrin were found. The blood indicated appendicitis, and, moreover, a well advanced stage of the disease. An immediate operation was done and an appendix in an early stage of gangrene was removed. The patient recovered promptly.

What might have happened had this appendix been left alone over night or longer? The blood examination possibly saved this young woman her life. This case illustrates the importance of blood examination as a routine procedure in doubtful cases of appendicitis. Physical examination alone failed to detect the disease, but blood examination was competent to show its presence. Such a single case as this is sufficient answer to the scoffing criticism of blood examination in appendicitis that we have heard so persistently from a certain quarter.

In another case of suspected appendicitis that I saw recently with Dr. DeLancey Rochester, there were 6,600 leucocytes, of normal differential distribution, a normal fibrin deposit and an absence of iodine reaction. In this case on the second day the symptoms were highly suggestive of appendicitis. The blood was flatly opposed to it, however, and the patient promptly

recovered without any further trouble. Many similar cases might be cited, but one suffices for illustration.

Intestinal Perforation in Typhoid Fever.—I have had the opportunity recently of examining the blood in three cases of typhoid perforation in the Buffalo General Hospital, in the services of Drs. Charles G. Stockton and Charles Cary. In not one of these cases was a gross leucocytosis found, though a relative neutrophilia was present. In all three cases an intracellular iodine reaction was demonstrated. In spite, therefore, of the absence of leucocytosis, due to overwhelming septic infection by which the reactive power on the part of the blood is paralysed, the regular presence of iodophilia may be of material assistance in determining the diagnosis. As iodophilia may occasionally occur in typhoid independently of any septic complication, its presence with symptoms of perforation is not a certain sign of perforation, unless slips of blood previously taken showed its absence before the advent of signs suggesting perforation. This caution indicates the method of avoiding error.

Acute Intestinal Obstruction.—This case was seen last July with Dr. Charles P. Chapin. The patient, Mr. G., aged about 50 years, had suddenly developed symptoms of acute intestinal obstruction and finally typical fecal vomiting. The bowels had not moved for several days and had resisted repeated efforts to secure their evacuation. Exploratory laparotomy was considered and almost determined upon. The blood was examined and found entirely normal. This was against any serious pathological condition of the intestine and encouraged a waiting policy. A renewed effort to move the bowels by large and repeated enemata proved successful at last and was followed by a large number of passages of a surprising amount of fecal material. The patient was relieved of distress and made an immediate recovery. The blood examination was the chief factor in postponing and finally making unnecessary the proposed laparatomy.

Trichinosis.—Mr. B., a German, about 50 years old, I saw in consultation with Dr. E. R. Gould during last July. He had had a moderate temperature for a few days, felt rather sore in the calves of the legs, the eye-lids were slightly puffy and ecchymoses were noted in the conjunctivæ of both eyes. The blood showed 9,800 leucocytes, over 30 per cent. of which were eosinophiles. About two weeks before the patient had eaten Westphalian ham, it was subsequently ascertained. As no other cause of so marked an eosinophilia could be determined, after careful examination of the skin, stools, and the like, it was concluded in view of the general symptoms that the patient was

suffering from a mild trichinous infection. Unfortunately, the opportunity was not afforded of confirming the diagnosis by examination of a bit of muscle from the calf.

Malaria versus Cancer of the Kidney.—In March, 1901, a woman about 60 years old was admitted to the Buffalo General Hospital, in the service of Dr. Roswell Park, for operation on what had been diagnosticated as cancer of the right kidney. A mass resembling the kidney could be felt in the right hypochondrium and the urine contained considerable blood. Moreover the patient had lost flesh, had grown weak and anemic and had had chills. Malaria had not been suspected. A glance at the fresh blood preparation showed half-grown tertian malarial organisms, and there was a marked anemia without leucocytosis. Upon inquiring it was found that the patient had come from Georgia about six months previously, had had malaria in Georgia, and had had chills on alternate days for about two weeks before entering the hospital, with bloody urine following the chills. The diagnosis looked clear—malaria, floating kidney and hematuria. Quinine was given, the chills and hematuria disappeared, the patient recovered strength and in a few days returned to her home, escaping an exploratory laparatomy.

Malignant Disease of the Left Kidney versus Splenic Hyperplasia, Chronic Splenic Anemia, Etc.—Every textbook of medicine lays down principles for the differentiation of splenic from renal enlargement, when a solid mass is encountered in the left upper abdominal quadrant. Such a differentiation is notoriously difficult in many cases, and any means of aid should be welcomed. I believe that such an aid is furnished by the blood. This has correctly guided me to a diagnosis in five cases of malignant tumor of the kidney, in four cases of chronic splenic anemia, in one case of splenic hyperplasia secondary to alcoholic portal cirrhosis, and in one case of splenic enlargement associated with and probably due to chronic passive congestion of cardiac origin, although this case, too, may perhaps be one of splenic anemia. I have met only one case in which the blood appeared to be a false guide and this case is still living and may perhaps, after all, accord with the rule.

The principle involved in the differentiation lies in the fact that malignant disease of the kidney is usually accompanied by a leucocytosis with relative neutrophilia, whereas on the contrary, simple splenic hyperplasia rarely shows leucocytosis and often distinct leucopenia. Malignant disease of the spleen would agree with malignant disease of the kidney in its blood picture and might cause confusion, except for the fact that

primary malignant disease of the spleen is so rare as to be almost a pathological curiosity and may, therefore, be neglected in practice. Inflammatory mass of the kidney and large perinephritic abscess are more likely to confuse. As a rule, these conditions can be differentiated from cancer of the kidney by the history, symptoms, physical signs, urinalysis and by the presence of the blood picture of abscess, *i.e.*, marked leucocytosis, increased fibrin and iodophilia. Increased fibrin deposit and iodophilia together are not often found in the blood with malignant tumor of the kidney, though they may be if marked inflammatory degeneration involves the cancer of the kidney. Observing all these points, it is usually easy to distinguish abscess from malignant disease of the kidney. Leukemia could cause no trouble, as a mere glance at a stained specimen of the blood would suffice to distinguish it, except in rare cases.

The problem is thus narrowed down to deciding whether a solid mass in the left hypochondriac region is a malignant tumor of the kidney or a simple non-malignant hyperplasia of the spleen, and the blood examination is usually competent to decide. This guide must be applied with caution and judgment and in strict conjunction with a careful weighing of the evidence furnished by the history, symptoms and signs of the case. Thus applied it is of undoubted value, as evidenced by the following illustrative cases:

Cancer of the Left Kidney.—Case I.—Mrs. C., aged about 60 years, was referred to me by Dr. Matthew D. Mann, in May, 1899, with the statement that she had a solid mass in the region of the spleen. The blood showed 17,000 leucocytes, of which 89 per cent. were neutrophiles, a normal fibrin deposit and a moderate secondary anemia. I referred the patient back with the diagnosis, "cancer or inflammatory mass of the left kidney, probably cancer. The diagnosis of cancer of the kidney was fully confirmed, Dr. Mann subsequently stated.

Case II.—Mr. C., aged 39 years, was admitted to the Buffalo General Hospital, in the service of Dr. Roswell Park, in June, 1899, for operation on an "enlarged spleen of splenic anemia." The tumor occupied exactly the splenic region, projecting downward and forward below the costal margin on the left side. It was firm and solid, smooth, non-movable, and had an anterior edge that was somewhat narrow or sharp, resembling a spleen. This mass had been growing rapidly for five months at least. No blood had ever been detected in the urine. The patient complained chiefly of a soreness in the left side. The blood, taken on the morning of the operation showed as follows: red

corpuscles, 3,804,000; hemoglobin, 51 per cent.; leucocytes, 14,700; neutrophiles, 86 per cent.; fibrin, normal; an occasional normoblast and moderate poikilocytosis. With such a blood picture, I followed the rule and made a diagnosis of cancer of the left kidney, as opposed to splenic enlargement. Dr. Park, however, in view of all the circumstances, determined to explore the abdominal cavity. The abdomen was opened, the spleen was found normal in size, the wound was closed, the patient was turned over, the kidney was cut down upon and found involved in a large cancerous growth.

This case is particularly interesting, as the mass felt exactly like a spleen, even after the patient was under complete anesthesia. Not a single point, except the blood examination, suggested kidney as opposed to spleen, and even the blood changes were rather slight. However, the operation showed that the blood, even in this case, was a truer guide than the physical signs. I might add that I have never encountered a case of malignant tumor of the kidney in which a hyperleucocytosis was constantly absent. However, such cases have been reported, though rarely, and their possibility must never be neglected.

Splenic Anemia.—On the other hand, the blood may be of distinct value in confirming the splenic nature of an abdominal mass in this region, as in the following case:

Mr. G. S., aged 59 years, I saw on February 21, 1899, in consultation with Dr. Carlton R. Jewett. A large mass with a sharp edge projected from the left costal border well down into the abdomen. For about one year, the patient had been growing weak and anemic. The blood showed a marked anemia and only 4,800 leucocytes. A second blood examination, three months later, showed a more advanced anemia and only 3,075 leucocytes. Two weeks after the second blood examination, the patient died and the necropsy showed a hyperplastic spleen of chronic splenic anemia.

Simple Splenic Hypertrophy Secondary to Portal Cirrhosis.—We occasionally see very large spleens in adults in various other conditions, such as the ague-cake spleen of chronic paludism, the enlarged spleen of portal congestion, that which rarely accompanies pernicious anemia, the marked splenic enlargement occasionally met with in portal cirrhosis, and that which is usually seen with Hanot's biliary cirrhosis. With the exception of the last, a rare condition, which is said to be associated usually with leucocytosis and which should offer no diffi-

culty in diagnosis, these various conditions rarely present leucocytosis and indeed leucopenia is sometimes found, especially in pernicious anemia. The absence of leucocytosis is therefore useful by indicating the simple splenic nature of such enlargements as against malignant tumor of the kidney, as exemplified in the following case:

Mr. V. B., aged 40 years, consulted me in May, 1900, complaining of general weakness. He was a confirmed drunkard, and had thickened arteries, the edge of the liver could not be felt and a mass with a sharp edge was felt on the left side of the abdomen, reaching almost to the transverse umbilical line. The blood showed a fair degree of anemia of a secondary type, a leucopenia of 3,120, a normal differential leucocyte count and a normal fibrin deposit. A diagnosis was made of simple splenic hypertrophy, secondary, probably, to cirrhosis of the liver; possibly, to splenic anemia. The patient committed suicide on January 20, 1902, affording me the opportunity of examining his organs. The liver was a typical hob-nail liver of alcoholic cirrhosis and the spleen, smaller than when previously felt (730 grams), presented the picture of simple chronic hyperplasia, secondary to cirrhosis.

The general principle which we have been considering, it must be expressly stated, applies only to adults or at least to those past the first few years of life, for the blood of infants and young children varies widely from the standard of adult life, and in childhood a marked leucocytosis is commonly found in conditions in which adults show no leucocytosis. I have dwelt at some length upon the application of this principle for the differentiation of simple enlargement of the spleen from malignant disease of the kidney, because its practical value warrants, I think, its recognition. It must not be applied indiscriminately with blind faith, but as a guide, supplementary to other methods of diagnosis, it is distinctly useful.

Many additional examples of the assistance of blood examination in diagnosis might be cited, if time permitted, but the few already given serve the purpose of concrete illustrations, as well as many. These cases speak for themselves and justify all that has been claimed for blood examination as a valuable clinical method of diagnosis in general practice. If you will employ this method you will save lives and suffering. Is it worth the trouble?

531 Franklin Street.

Gout and its Treatment.

By M. A. AUERBACH, Ph. G., M. D., New York City.

GOUT (podagra) is an acute or chronic affection, due to an abnormal accumulation of uric acid in the blood and tissues, causing various symptoms, of which arthritis is the most distinctive and significant.

The history—with the exception of the classic work of Thomas Sydenham, "Tractatus de podagra et hydrope," published in 1683, and based upon his own case,—he having been himself a victim for thirty or forty years,—of our knowledge of gout is the history of the development of its pathology, which begins with Wolloston's discovery in 1797, that the deposits in the joints and vicinity in this disease are largely composed of uric acid. Previous to this time another view of the nature of gout was accepted, though without tangible foundation. In 1784, Cullen promulgated the nervous theory of gout, which was adopted from G. E. Stahl.

The tendency to gout is more frequently inherited, but is also acquired. Between 50 and 60 per cent. of all cases of gout can be traced to ancestry, parents or grandparents. More men are gouty than women, and it is the male line through which the tendency is most frequently transmitted. It is not usually manifested until after thirty-five or forty years of age, sometimes even later, but the signs which are almost sure to be present in gout may show themselves before the twelfth year. While over-eating, especially of meats, and intemperate drinking, associated with the luxurious habits which grow out of the possession of wealth, are the most frequent causes of acquired gout, these last, however, are by no means essential. Sir Dyce Duckworth's studies of gout in what is probably the richest field in the world, London, go to show that many of the peasantry in Ireland, among whom gout is almost unknown, become gouty after having lived for a time in London. On the other hand, not every person who inherits a tendency to gout becomes gouty, since the primary causes above mentioned may have been wanting. In others the tendency may be so great as not to require the favoring causes.

While alcohol is an acknowledged cause of gout, it has been observed that something depends on the form in which it is presented. Malt liquors, especially the "heavy" English ales and beers, strong in alcohol, are more active in the production

of gout than the lighter beers consumed in Germany and this country. The same being true of the strong and sweet wines, of which port and sherry are the type, while pure whiskey is less harmful. The glycogenic substances in the malts and sweet wines are probably responsible for the source of acid fermentation products in the stomach, which, after absorption, reduce the alkalinity of the blood and impair the solvent power of the uric acid. An interesting exciting cause of gout is lead poisoning. This is met particularly in England, and especially in London, as pointed out by Sir Alfred Garrod in 1854. It is, however, rare in other parts of Great Britain and Ireland, and is growing less in London. For in 1870, according to Garrod, 33 per cent. of people who suffered from gout had been poisoned by lead. It may be, as suggested by Alexander Haig, that the effect of plumbism is to diminish the alkalinity of the blood. In this country the combination is comparatively rare.

It cannot be claimed that the pathology of gout is thoroughly established, although so many facts bearing on it are well determined. In this respect it resembles diabetes mellitus. It is commonly admitted that uric acid is in some way causative. Whether, however, the uric acid thus responsible is the result of the increased formation or diminished excretion, or both, is not so generally acknowledged. The ultimate result, however, is the same, whether it be from diminished excretion or increased formation, or both; there is an accumulation of uric acid in the blood, which is responsible, first, for certain premonitory symptoms of gout, and second, for certain local symptoms. The latter are of an inflammatory nature, and consist essentially in pain, swelling and redness of joints, preferably the smaller ones, and especially of the metatarsophalangeal articulations of the great toe; more frequently, perhaps, of the left great toe.

As to the relation of the uric acid compounds to the local inflammation, it is scarcely necessary to say that uric acid does not exist as such in the blood, even in pathological conditions. The normal urates, as originally shown by Bence Jones and confirmed by Sir William Roberts, are quadriurates. Such is the composition of the urate-sediments in urine. In the pathological state these are converted into the less soluble biurates, which make up the local deposits. It has all along been considered that these deposits are the direct cause of the gouty inflammations.

The most recent studies on this subject reaffirm the older view, that the mechanical theory offers a natural and complete explanation. The crystalline urates precipitated in the cartilaginous and fibrous structures of the joints necessarily act as foreign bodies; they excite irritation, clog the lymph-channels, exercise pressure on the tissue elements and impede their nutritive operations.

These effects sufficiently account for the inflammation, pain and swelling which ensue, and explain the remoter degenerative changes which follow.

Of modern authorities, Ebstein is the most eminent who ascribes the excess of uric acid in the blood to an abnormal formation of this substance in the body, in parts also which do not normally produce it, as bone, marrow and cartilage. The lymph and blood becoming surcharged, a balance is commonly restored by increased renal excretion or perhaps by decomposition of the uric acid. When, however, from any cause the lymph moves slowly, the so-called premonitory symptoms of gout occur—namely, a "tired feeling," vague pains, and the like. If an actual stasis occurs, the acute attack appears. This concentrated solution of uric acid acts like a chemical poison on certain tissues, giving rise to "necrobiotic changes," and when these reach a certain change characterised by an acid reaction, the uric acid is deposited in them as sodium biurate. If this stage is not reached, the local symptoms disappear and the joints return to their natural state. So much of Ebstein's view as makes a previously degenerated state of the tissues a necessary condition of the deposit of uric acid is commonly admitted by modern authorities as represented by Ord and Dyce Duckworth.

The nervous theory of gout was promulgated by Cullen in 1873, as a mixed neuro-humeral rather than purely neural. Of modern authors Sir Dyce Duckworth has taken the most pains to elaborate and establish the view that gout is a neuro-humeral disease, the sum of which may be said to be as follows:

That the diseased states recognised as of undoubted gouty nature are primarily dependent on a functional disorder of the nervous system, and that thus gout is a primary neurosis. That this, like others may be inherited or acquired, modified, or even repressed, and may be associated with other neuroses. A large part of the symptoms known as gouty are due to perverted relations of uric acid and sodium salts caused by the neurosis.

Persons subject to attacks of gout sometimes have premonitory symptoms suggesting the approach of an attack. These vary with the individual and are significant only in each case. There may be headache, neuralgia, anyone of the numerous symptoms of deranged digestion, irregularity of the heart's action, palpitation, high tension of pulse, depression of spirit, drowsiness, disposition to yawn, a "tired feeling"—in fact any symptom which the patient learns to associate with the attack. Attacks are apparently also brought on by anything which lowers the vitality of the patient. On the other hand, a supper with wine or a single glass of champagne will often produce an attack.

The first true symptom of the typical attack is articular pain, commonly in the great toe, at the metacarpophalangeal joint, and with its appearance the premonitory symptoms usually pass away. The pain is extreme, sharp shooting and sudden, often awakening in the middle of the night a patient who has gone to bed in apparent good health and least expecting an attack. With this pain are the swelling, heat and discoloration. Rarely the attack begins with a slight chill. On the other hand, there may be pain without heat, redness or swelling and all the typical local anatomical features of an attack without pain. In some instances the attack develops more slowly. At times the first attack is so slightly distinctive that it is assumed to be something much more trifling, as rheumatism or the result of some slight injury, while the personal peculiarities, natural or acquired, always more or less influence the symptoms. After the nocturnal outburst, the extreme pain diminishes as morning advances, but it may, and in fact is likely to repeat itself for five or six days, when the attack terminates.

Some fever usually accompanies the onset of acute gout. The temperature promptly rises to 100° F., but does not far exceed it, 102° F. being the usual maximum attained. As in other acute diseases the temperature arises in the evening. The attack terminates with desquamation of the epidermis over the inflamed joint.

Changes in the urine are almost distinctive. It is scanty, acid, high-colored and of high specific gravity. It deposits urates on standing and often contains a small quantity of albumin. It contains sometimes sugar in small or even decided quantity, but I am certain that at other times the reaction of uric acid on cupric oxide is mistaken for glucose. During, or

preceding an attack the uric acid excreted may be diminished, later it may be increased, but as elsewhere stated, a relative increase in uric acid is often mistaken for an absolute increase in the twenty-four hours' amount. The probabilities are that these changes are inconstant.

A recognised symptom of acute gout, and sometimes the only one, is, pharyngitis, and now the term of "gouty sore throat" is one in common use. There seems no way of distinguishing it locally from other forms of sore throat in which there is no decided swelling.

Gout is said to be retrocedent or metastatic when it disappears suddenly from its external site and there are substituted for the external symptoms derangements of some internal organ, especially the heart or stomach, or brain or urinary bladder. In the first there appear cardiac symptoms of varying severity, including pain, shortness of breath and irregularity of the heart's action; in the second, gastrointestinal pain, a sinking sensation, vomiting or diarrhea, often associated with severe mental excitement or depression; in the third, meningeal symptoms, and in the fourth, cystitis. More rare events are gouty orchitis, parotitis and urticaria, or other fugitive skin affections. Metastasis is more prone to occur in atonic cases. Sudden death has supervened in some instances, but post-mortem lesions of a definite kind seem to be wanting, at least lesions which can be held responsible for symptoms.

As repeated attacks of gout occur and the patient grows older, certain changes take place—the joints deformed by tophaceous and other deposits, the lipping, the seal-fin hand, the renal and arterio-vascular changes, and the interstitial nephritis, and the like. The urine is now increased, lighter hued, contains albumin, and a few hyaline and granular casts.

The treatment of gout easily divides itself into two parts: first, that of paroxysm or acute attacks; second, that of gouty diathesis or tendency, which eventuates in the acute attack. Taking up the latter first, it is plain that if uric acid is its cause, whatever diminishes the amount of uric acid in the economy must tend to relieve gout. It is plain, also, that we may diminish uric acid in two ways: first, by confining the gouty person to such food as produces a minimum of uric acid; second, by administering such medicines as will promote its solution and elimination. The first of these constitutes, in the main, the dietetic treatment, and second the medicinal.

The Dietetic Treatment.—It consists essentially in the elimination, as far as possible, from the dietary of all nitrogenous or albuminous principles, being those whose complete combustion results in urea and incomplete in uric acid. I say as far as possible, for it is practically impossible to eliminate them altogether. The foods which are the type of this class should, however, be altogether omitted.

The typical foods permissible from the standpoint of composition are milk, butter, fruits and the succulent vegetables, except beans and oatmeal. To these oysters and lobster may be added, moderately; fish, except those containing a large amount of protein, and, where extreme rigidity is not required, poultry in moderate amount; but all butcher's meat should be strictly forbidden. It is usual, also, to interdict the use of carbohydrates (starches and sugars,) as well as the hydrocarbons (fats and oils).

There are, however, other sorts of ingesta, also entirely or almost free from nitrogen, acknowledged to be both a predisposing and exciting cause of gout—namely, malt liquors and wines. These are composed of water, alcohol, carbohydrates and a trace of mineral matters, but no nitrogen. It is not easy at first thought to understand why these substances should be harmful. Experience, however, shows that the stronger wines, such as port, Madeira and sherry, by their continued use are very likely to produce gout, while the lighter wines,—the clarets, hocks and Moselle wines,—if taken in moderation, rarely cause it. After these, stout, porter and strong ales induce gout. Even lager beer, which contains but 3 per cent. of alcohol, is capable of acting similarly, and I have known many men who have been forced to give up this beverage because of its effect. Cider and perry least of all beverages predispose to gout. On the other hand, distilled spirits, especially whiskey, are almost entirely without effect in producing gout. Why is this? Apparently, the amount of alcohol is not the measure of the effect, for whiskey, gin, brandy and rum all contain more alcohol than any of the wines alluded to. If reference is made to the wines most apt to produce gout, it will be found that they are those which contain a considerable quantity of both sugar and alcohol. Such are port, sherry, and Madeira, all of which contain more than 15 per cent. of alcohol and much sugar; also sweet champagnes, containing 11 per cent. of alcohol. On the other hand, some very sweet wines, as Tokay, Malaga, and the higher Sauternes, which

contain much sugar, produce gout less rapidly. It would seem that those liquors which contain alcohol in combination with other substances, especially sugar, are potent gout producers, particularly where they excite indigestion, probably by restricting elimination, rather than producing more uric acid.

As to the acidity of alcoholic drinks, their influence is pretty clearly as exciting causes. In this way act the beers, in which both alcohol and sugar are present in small amounts, but which are highly acid. An explanation of this fact is less ready from the standpoint that the acute attack of gout is due to reabsorption of the deposited uric acid by an alkaline blood, than on the supposition that the attack is due to the irritating effect of uric acid deposited in the joints, because of the diminished alkalinity of the blood induced by the absorbed acid. Whatever be the explanation, few facts in the clinical history of gout are better established than that the ingestion of acid is an exciting cause of attacks.

A most valuable adjuvant to the dietetic treatment, are the natural mineral waters. The waters which have heretofore received almost universal approval, are the alkaline waters, although those possessing purgative properties also enjoy much reputation.

The actual mineral waters which have acquired the greatest reputation in the treatment of gout, are those of which sodium bicarbonate is the chief ingredient, to which the calcium bicarbonate is regarded a valuable adjuvant. Such are the alkaline waters of Vals and Vichy in France, Eviaules-Bains in Switzerland, Neueuahr and Fuchingen in Prussia, Coutrexville and Vittel in the Vosges, France, and Dax in France. Other waters possessed of reputation in the treatment of gout, in which the quantity of alkaline bicarbonate is smaller, owe it to their combined alkaline and aperient properties, chiefly due to sodium sulphate and magnesium sulphate, and belong to the second category of remedies for the treatment of gout. Such are the alkaline and saline waters of Carlsbad and Marienbad, in Bohemia, Kronthal, in Nassau, and Brides-les-Bains, in Savoy. Then there are saline waters represented by Baden-Baden, Ems, Homburg, Kissingen, Wiesbaden, and our own Saratoga waters. In saline waters we are considerably more fortunate in this country, the Saratoga waters furnishing all that can be desired. Finally, there are the bitter acidulated and purgative waters. Hunyadi Jaños, Friedrichshalle and Rokoczy, in Hungary,

Pölua, in Bohemia, and Rubinat, in Spain,—rarely resorted to in gout, but useful as eliminating agents. Among the weaker aperient waters are those of Bedford Springs, Pa., in this country.

The use of these mineral waters is especially indicated in a continuous manner between the attacks with a view to averting them. Especially useful are the thermal waters in the chronic arthritic complications, in which their internal use is combined with bathing. In this connection may be mentioned Carlsbad and Marienbad, where also the mud-baths are employed, Baden-Baden, Ems, Wiesbaden, Hammon R'Irha in Algeria, available in winter, Plombures in the Vosges, and Dax in France, Homburg and Kissingen are also resorted to for their baths, although the waters are cold.

The second category of remedies — the aperients — are decidedly useful in gout, both as eliminators and to prepare the way for the absorption and prompt action of the alkaline bicarbonates. They are not, however, used at the present day as freely as a century ago, and they are commonly reserved for the acute attack.

Hygienic measures are also of importance in the treatment of gout. The patient should bathe daily, using the cool bath in the morning or the warm in the evening on retiring, as experience may determine to be the best. The skin should be thoroughly rubbed with a rough towel and daily exercise should be practised, an open-air, out-door life being desirable whenever possible.

The Medicinal Treatment of an Acute Attack of Gout.—As a rule, the use of medicines is reserved for the acute attack. From the earliest history of the disease, practice has recognised two classes of remedies in the treatment of gout—namely, alkalies and purgatives, the object of both being to eliminate the offender, the first by producing soluble combinations which pass off readily by the kidneys, the second to carry it off by the bowels.

First, as to the alkalies and alkaline combinations. My experience places the (sidonal) quinate of piperazine easily at the top, and while it is not so rapid in its effect in relieving the pain of an acute attack of gout, it is nevertheless an invaluable remedy, exceeding all others. During an attack it should be given in doses of ten grains every hour and a half to two hours, dissolved in at least eight ounces of distilled

water. Even larger doses may be given with advantage if borne by the patient. With relief to the acute symptoms, the dose should be reduced; but the remedy should not be discontinued, and between attacks smaller doses should be kept up for some time. These, however, may be substituted by the natural mineral waters.

Among the eliminating remedies is the time-honored colchicum, a drug which is of undoubted value in gout, but which, in my experience, must yield the palm to sidonal (quinate of piperazine). For a long time its action was inexplicable, and it came to be spoken of as a specific in gout, as quinine in chills and mercury in syphilis.

The aperients commonly used in gout are the salines, of which the magnesium sulphate is the favorite. Sodium sulphate is also used, and it is the constituent of the most actively purgative mineral waters, the Hunyadi Jaños, Rokoczy and Friedrichshalle mineral waters—already mentioned, now largely used instead. A favorite combination of the older physicians, was magnesium sulphate, two drachms; magnesium carbonate, a scruple; suspended in an ounce of cinnamon water, two or three times a day, until active purgation results.

Colocynth is also employed in gout, and advantage is taken of this fact in the preparation of the secret remedy, known as Laville's tincture, which is very largely used by the laity, and which undoubtedly has a very prompt effect in many cases of acute gout. The following has been published by the *Druggists' Circular*, October, 1889, as the composition of Laville's remedy, as determined by analysis:

Quinine	5	parts.
Cinchonine	5	"
Colocynthin	2.5	"
Lime Salts	5	"
Water	82.5	"
Alcohol	100	"
Port Wine	800	"

For the relief of an acute attack of gout, leeches, blisters, and cold have all been discontinued of late years, not only because they are useless, but also because their use has been followed by fatal attacks of the so-called internal gout. Warmth and moisture do, however, have a mollifying effect, which is increased if the liquid preparations of opium be associated. Cocain, which might be expected to be useful, operates

only through open surfaces. Should the latter be present, a 5 per cent. solution may be applied on lint.

It constantly happens that the pain in a paroxysm of gout is so severe that it is impossible to wait until the effect of the sidonal (quinate of piperazine) is secured, and a hypodermic injection of morphine is absolutely necessary to relieve the sufferings of the patient. I must remind the reader, however, that as many old subjects of gout have contracted kidneys, the use of morphine under these circumstances is attended with some danger and the drug should be used with great caution.

All pressure by boots on joints disposed to gout should be carefully avoided, as well as injuries, as such influences undoubtedly are predisposing causes. Muscular and mental fatigue are exciting causes of acute attacks and should be avoided by the gouty.

The true nature of a metastatic attack having been determined, it must be relieved symptomatically, while efforts to stimulate a true external attack may be made by hot mustard foot-baths, sinapisms, and the like. It has even been suggested that a pint of champagne may be advised, this being the wine most frequently responsible for acute attacks.

The following case histories will be of interest:

Case I.—Mrs. N. S., aged 22; married; three children; family history negative. Personal history: three years previous to her first visit to my office (March 23, 1901,) she was suddenly seized at night with severe pains in her right leg, especially involving the large toe. There were no premonitory symptoms. She had always led a very regular life, had never indulged too freely in alcoholic beverages, but usually took a glass of stout with her mid-day meal. These attacks had recurred at various intervals with more severity than the first one, also accompanied with redness and swelling of the joints.

Upon examination I found tophaceous deposits in both ears, deposits and partial ankylosis of various joints, especially that of the right wrist. On March 23 she came to me for treatment, feeling very heavy and tired. The case was readily diagnosticated as gout and she was immediately given sidonal, or quinate of piperazin, in 10 gr. doses, repeated 8 times a day, making a total of 80 grs. a day. On the night of March 24, she had rather a severe attack and sent for me on the morning of the 25th. She was then placed upon a regular diet and was directed to continue the powders of sidonal (quinate of piperazin). I saw her again on March 27 and 29, at which times she was able to be up and about, but the joints were still swollen and painful. On April 1, the swelling had greatly subsided and on the

5th had entirely disappeared. Her wrist was the only joint that troubled her. On the 10th she called for further treatment. I broke up the adhesions, keeping her on a special diet and continued the sidonal (quinate of piperazin) in 15 gr. doses, four times daily. I saw her again on April 12, 17 and 29; the wrist showing slight improvement. Further visits were made May 6, 13 and 31, June 7 and 29. I did not see her again until October 28. Up to that time she had had no recurrence of the gout, there was also much improvement in the condition of the wrist. She made further visits to my office on November 2, 11, 14, 18, December 6 and 13, at which times she was again enjoying full use of her wrist. I made another examination in January 1, 1902, and a last one on January 24, at which time the tophaceous deposits had almost entirely disappeared.

Case II.—Mr. Wm. F. Clark; single; mother living; father supposed to have died from gout; at any rate, had suffered from that disease for many years before his death, but no other members of the family had been subject to it.

Personal history: up to March 23, 1901, had enjoyed exceptionally good health. His troubles, however, began after participating in a dinner on the above date, at which a longer sitting than usual was indulged in. The 24th and 25th were spent in agony. The pains in the limbs were of a shooting character and as night drew on became unbearable. The joints were hot and swollen, but the traditional involvement of the great toe was absent. On the evening of the 25th, I was called to treat Mr. F. and came very near diagnosticating his case as one of articular rheumatism, but fortunately took his family history into consideration as well as the cause of the attack—namely, a debauch, for later developments showed it to be an atypical case of gout.

Mr. F. was placed upon sidonal (quinate of piperazin) in 10 gr. doses, from 8 to 10 times daily, making a total of from 80 to 100 grs. per day. After the first eight doses (80 grs.) there was a marked decrease of pain, redness and swelling, until on the 30th the attack and its effect had practically disappeared, but left my patient in an extremely uneasy frame of mind. On April 4 he called at my office desiring me to keep him under my care until I thought there was no further fear of a recurrence. I saw the gentleman again on April 7, 11, 15 and 22, making analysis of the urine at each time, but found nothing to cause alarm. In May I saw him but twice, the 6th and 31st, for the same purpose, with the same result. In June I saw him five times, 13, 17, 20, 24 and 27, with negative results. And lastly in July, several visits with equally negative results.

Although during the latter stage of the treatment the dose was reduced, a rigid diet was enforced with the addition of bland mineral waters as a beverage. In fact this is a routine practice in all my cases of gout. I have met the patient in question

a number of times and he has never had another attack. He still continues upon the prescribed diet.

Case III.—Mr. H. O.; born in Spain; single; aged 47; family history not obtainable. Called at my office on the evening of March 25, feeling "queer"; complained of shooting pains, headache and impaired vision. Never had a previous attack. Upon examination nothing unusual could be found. The case was then set down as one of uremic origin. A sample of urine was taken and found to contain a large amount of uric acid. The gentleman gave a personal history of very high living; being employed by a wine house, his business required his indulgence in considerable quantities of heavy wines and especially champagnes. I advised entire abstinence from vinous or spirituous beverages and restricted his diet; advised the use of some good lithia water, about half a gallon a day with 10 gr. doses of sidonal (quinate of piperazin) three times daily. Early on the morning of April 1, I was summoned in great haste. Mr. O. had been suffering great pain throughout the night, which toward morning had become unbearable. Upon examination, I found the large toe of the right foot twice its normal size and extremely sensitive, the adjoining joints were inflamed and painful upon pressure. Upon inquiry I found that my patient had neglected to follow my advice and had dined well and late only the night before. The powders of sidonal (piperazin quinate) were increased to 10 grs. every hour and a half, dissolved in a goblet of water. The offending member was enveloped in cotton for warmth as well as protection from external pressure or contact. On the next day I found my case somewhat improved, the swelling had almost entirely subsided and likewise considerable of the pain. The powders were decreased to one every two hours. On April 3, I called and found patient sitting up, but nursing the affected member. An examination of his urine showed a marked decrease of uric acid and great improvement otherwise. I reduced the powders to one every three hours. Subsequent visits were made and on April 21, patient was discharged. Mr. O. was, however, kept under observation until October 25, 1901, without any recurring attack.

Case IV.—Mr. H. McC.; married. Family history: father and mother both living in Germany—aged 76, 54 respectively—and enjoyed good health. Two brothers and one sister, all living, and had good health. Personal history: aged 36; has enjoyed good health all his life up to October, 1901, when he was taken with an acute attack of indigestion which lasted about three weeks. Since that time he has been suffering with severe headaches and a strange feeling of an impending danger. On February 7, 1902, I was called to his home and found Mr. McC. suffering from acute pains in his back and lower limbs. Upon inspection I found the joints swollen and red, very tender

upon pressure, the slightest movements eliciting severe pains. There was some rigidity at this time, although probably of a voluntary nature. The urine showed abnormal amounts of uric acid. Upon further investigation his tongue was found to be heavily furred and he complained of constipation, movements occurring every third or fourth day. His habits were not such as would suggest gout and in this case, which is not a true case of gout, I have been unable to trace its real origin, unless due to the constipation, which latter may have played an important part through autointoxication.

Mr. McC. was placed on laxatives, tonic stomachics, sidonal (quinate of piperazin) in doses of 8 grs., every three hours, given in a glass of vichy. He was ordered on light diet and was advised to eat fruits. On February 9, I called again and found that he felt somewhat better, the swelling and tenderness had greatly subsided; there was still some redness and pain on motion. On February 12, the more severe symptoms had entirely abated, hence the dose of sidonal was reduced to 10 grs., three times daily. On February 24, patient left city for a short trip south, feeling entirely well. Mr. McC. returned March 15th and has been under my observation ever since. He has had no recurrence of the symptoms.

83 Madison Street.

Report of Two Interesting Medico-legal Cases.[1]

By WILLIAM C. KRAUSS, M. D., Buffalo, N. Y.

THE two following medico-legal cases which came under my observation within the past year, offer peculiarities which make this publication desirable. They show—the one how slight a shock or injury may produce serious or fatal results; the other, how great or incredible a fall and yet no fatal or serious results followed. Both cases are therefore remarkable and teach the lesson that physical injury is not commensurate with the degree of violence sustained.

J. J. W., aged 63; height, 5 feet 9 inches; weight, 150 pounds; occupation, worked in an elevator for about forty-two years; constitution, unusually strong and robust; had never been sick or disabled, and not addicted to liquor or tobacco.

For the past fifteen years he has been employed at the City Elevator B, located at the corner of Michigan and Ohio Streets, Buffalo, N. Y. This elevator, owned by the Western Transit Company, was a grain storage elevator, built of wood with sheet iron siding, about 140 feet in height from the dock to the roof.

1. Read at the 35th annual meeting of the Medical Association of Central New York, held at Syracuse, N. Y., October 21, 1902.

On the roof, supported by a frame work of timber, was a water tank with a capacity of 9,000 gallons. This tank was generally supposed to be filled with water ready for emergency and was connected with the elevator proper by a small size iron water pipe.

On the evening of August 7, 1900, Mr. W., after helping unload one of the company's grain boats, went to his office on the machinery floor of the elevator, which was located on the next to the top floor and directly under the water tank. The supports of this tank had been superficially examined some time before, and some of the timber found defective and repairs had been partially made.

On the night of August 7, 1900, without any warning, the supports gave way, the tank crashed through the roof and upper floor and burst into the room occupied by Mr. W., tearing a large hole out of the side of the elevator, carrying him to the dock below, a distance of 102 feet. He was picked up in an unconscious condition and taken to the Fitch Emergency Hospital. A careful examination by the hospital staff failed to find any fractures or dislocations, and no marked abrasions or tumefactions anywhere about the body.

His family physician, Dr. Herbert Mickle, was called and his report taken from the testimony at the trial is as follows:

I was called on August 7, 1900, to see him at the Emergency Hospital, where he had been taken after a fall sustained that morning. I found him in bed in an apparently semi-conscious condition, suffering severely from shock, cold sweat, cold surface of the body and general depression. At the request of the family and at my own suggestion, he was moved to his home, or his son's home, on Herkimer Street, in an ambulance, and I took charge of the case and attended him there until the following December, 1900. His condition at first was one of apparently only semi-consciousness; he would respond to questions, but with hesitation; there was a condition of mental semi-consciousness and great mental irritability present. He would not pursue any extended conversation, he would simply reply to simple questions, and when he did reply there was some thickening of the tongue present in these first few weeks. There was a condition of the pulse that was marked, beginning at about 60 to 65, slowing down to from 44 to 48, and remaining there for some weeks. He had subnormal temperature, ranging from 97° to 97.5°. Then he cleared up to some extent. His pulse improved somewhat in character, and he finally was allowed to sit up, and then—about, I think, it was the 7th or 8th of December—it seemed that a change of surroundings and of air would be a good thing for him and he was taken out in the country, when I lost sight of him till a few days ago; having had no opportunity to see him again. His condition at the time, I considered was due to concussion of the brain. While the exact nature of his trouble was to some extent obscure, still there

was some profound injury to the brain as indicated by the pulse, the subnormal temperature, the general depression, the thickening of speech—he could not articulate clearly and distinctly—there was some mental wandering, although that was never a marked feature, as far as my own observation went. He was a

City Elevator B, showing opening 102 feet from dock below, through which J. J. W. was forced by the collapse of a large storage tank, similar to the one on adjacent elevator. Some of the supports of the collapsed tank are still seen on Elevator B.

little bit dreamy, I think, at times, as far as I could make out, and he complained of a great deal of pain about the left shoulder, but there was no external or visible evidences of injury that I could determine.

To the question whether he complained of other pain? Dr. Mickle answered yes, although the left shoulder was the chief

seat of pain. Earlier he had pains in the head and pains in the back.

From the third to the sixth week after the injury, his pulse varied between 40 and 48, and his temperature ranged from 97.5° F. to 98° F. He complained of pains shooting through his temples and about the left shoulder; his mental condition cleared up slightly and he seemed to improve somewhat.

On September 11 and again on the 13, 1900, I was asked to make a careful examination and report my findings to the representative of the Maryland Casualty Insurance Co. in Buffalo.

The long continued duration of subnormal pulse and temperature, with apathy, dulness of intellect, dull head pains and a loss of memory of recent events, suggested to my mind the possibility of a chronic form of meningitis following a severe cerebral concussion, and my report was made accordingly.

On December 10, 1900, he was taken to his own home on a small farm near Buffalo.

On April 30, 1901, I was permitted to examine him with Dr. Morse, of Batavia, N. Y., and found some improvement in his mental condition, a higher pulse rate, 60 to 69 per minute, no paralytic condition of the cranial nerves and nothing to indicate any organic cerebral lesion. He still complained of pain in his head and back, difficulty in passing urine, stiff, awkward gait, muscular feebleness; in short, he presented the picture of a premature case of senility.

Not being able to arrive at any satisfactory settlement, the case was tried before the Supreme Court, Judge Henry A. Childs, presiding, and a verdict of $7,500 was awarded the plaintiff.

The defense was ably presented by Hon. George A. Clinton, assisted by Messrs. M. Spratt, and Talbot. The plaintiff was represented by Judge S. E. North, of Batavia, and Drs. James W. Putnam, Herbert Mickle, of Buffalo, and H. A. Morse, of Batavia, testified for the plaintiff. The unanimity of opinion among the physicians, that it was a simple case of concussion of the brain without consequent brain lesion, and that the effect produced was to hasten senility and thereby shorten his period of usefulness and productiveness, was appreciated by the court and led to a speedy termination of the case by the jury.

The case is remarkable from the fact that it is possible that a man could be forced out of an opening and be dashed 102 feet

to the ground without receiving fatal injuries, or even the slightest abrasion of the skin. The only explanation which I can offer, is that he was surrounded or immersed in the water which served as a cushion or water-bed, thus breaking the shock and thereby saving the man's life.

Case II.—J. H., aged 38 years; height, 5 feet 9 inches; weight, 150 pounds; occupation, painter. His early life was uneventful; was a steady, temperate man; giving no history of alcoholism or syphilis; was a strong, vigorous man. On July 1, 1901, he suffered from a heat stroke, and one week later suffered from a fainting spell. Three weeks later he had a severe attack which undoubtedly was epileptic in character. Six months later he had 3 or 4 of these epileptic attacks in one day. He, however, attended to his work, never losing a day and was examined and accepted for life insurance the early part of the year, 1902.

On Saturday, May 17, 1902, while leaving a street car, he was suddenly thrown backwards by the abrupt braking of the car, striking his back against the seat. A thirty pound pail of paint which he was carrying was thrown to the floor. He was assisted out of the car to a waiting-room on the street corner and after a few minutes took another car to his home. He complained of pain in his back and an abrasion of the skin was found at the level of the 8th thoracic vertebra. He was unable to go to work the following Monday, and on Tuesday, Dr. Willard was called to attend him. The patient let drop a glass from his left hand on that day and this led to the calling of Dr. Willard, who found weakness of the left arm and left leg. On May 31, two weeks after the injury, I was called and found the following condition. A small abrasion about the size of the palm was still present at the middle of the back, about the height of the 8th thoracic vertebra. There was no especial pain or tenderness over this spot. The head offered nothing abnormal. Both sides of the face were symmetrical, the tongue showed no deviation or protrusion. There was marked weakness of the left arm and leg with exaggerated tendon reflexes. Sensation was not impaired. He suffered somewhat with headache, but otherwise was free from pain.

I was inclined to regard the weakness of the arm and leg as of functional origin, because of the non-participation of the face and tongue, being an incomplete hemiplegia, and also because it seemed almost improbable that a direct trauma to the spine could produce an organic lesion of the brain. On the other hand, I could not clearly associate an exaggerated patellar reflex and a true ankle clonus with a functional paralysis, and my diagnosis of the case was left open for future development.

Leaving the city for a few days the patient was attended by Dr. S. A. Dunham, who offers the following information: "I was called on June 4, 1902, and found him suffering with a

severe frontal headache, drowsiness, his mind dulled, furred tongue, and an incomplete hemiplegia, having more control over the left leg than over the left arm. He continued to grow rapidly worse, the paresis became more marked, incontinence of urine and feces appeared and his mental faculties were growing duller. He was drowsy and listless most of the time, but when roused up would answer questions without any defect of speech.

"He was removed to the Riverside Hospital on June 18, 1902. His pulse while at hospital ranged from 52 to 58; his temperature varied from 96 3-5°F. to 98 4-5°F. He was always confused mentally, desired to go home, became obstinate, and had one epileptic seizure."

On July 1, he was removed to his home where he grew rapidly weaker, physically as well as mentally. The paresis of the left arm and leg became more pronounced and he gradually fell into a condition of stupor bordering on coma. He had three epileptic seizures while at home.

On July 15, he entered the General Hospital in a comatose condition and at noon on July 16, he suddenly expired. The autopsy made the following day by Dr. H. U. Williams showed the following condition:

Large, not very muscular man; rigor mortis, not marked except jaw. Left upper chest, three large hemorrhagic spots, probably hypodermic marks. Lividity, usual, with small darker areas not marked. Irregular pigmented (light brown) area 3 inches in diameter in lower dorsal region.

While removing skull cap large amount of venous blood escaped. No thrombus in superior longitudinal sinus. Dura not remarkable. Left ventricle, unusual amount of fluid. Nothing found on left side in cortex or basal ganglia. Cerebellum not remarkable. In cutting through right hemisphere find cavity containing blood which comes near surface of brain in median line near fissure of Rolando. Cerebral substance for 1½ inches is discolored yellow to yellow-brown, and is softened. Hemorrhage extends within ¼ in. of corpus striatum and optic thalamus, but does not enter either. Hemorrhage lies mostly in centum ovale, coming just to the gray matter of the cortex at fissure of Rolando. Its size is about that of a large walnut, not including yellow area around it. The long axis is perpendicular; contents are clotted blood. About ¾ in. in front of it is a cavity, clean cut, thin transparent walls, containing clear fluid; slightly lobulated; cavity about size of a cherry. Diaphragm is at the height of the 5th space on the right side and 6th rib left side.

No fluid in pleural cavities. Left lung free, crepitates well, not remarkable. Right lung adherent slightly at apex, slightly congested posteriorly; irregular area of collapse posteriorly. Crepitates well. Bronchial tubes contain small amount of mucus. Pericardium contains about a teaspoonful of fluid. Heart good size. Pulmonary semilunar valves normal.

Tricuspid normal. Mitral normal. Aortic valves normal. Wall of ventricle in good condition. Aorta normal, no sclerosis. Openings of coronary arteries not sclerosed. Heart weight, 11½ oz. Peritoneum normal. Spleen small, normal consistency, dark red, Malpighian bodies not distinct, trabeculæ distinct. Left kidney weight, 6 oz., large, a little dark, normal consistency, capsule comes off easily, cortex good breadth, medullary rays distinct; ureter normal. Right kidney same as left. Weight, 5½ ozs. Bladder contains 2 or 3 ozs. of amber colored, slightly turbid urine.

Gall-bladder contains no calculi; 1 oz. green bile. Liver good size, a little dark, firm, large amount of venous blood runs from veins on section, dark brown, normal. Pancreas is of good size, pink and normal. Stomach normal, not remarkable except considerable mucus adherent to walls. Ileum normal. Appendix normal.

Anatomical diagnosis—Cortical cerebral hemorrhage right hemisphere; not very recent. Cyst same hemisphere anterior to last.

Microscopical examination of the brain substance between the cyst and the hemorrhage revealed no breaking down of brain tissue, and no aneurysmal condition of the end arteries. The arteries in the hemorrhagic area were not examined. There was no atheromatous condition of the aorta, or of the vessels in the circle of Willis; no renal involvement or valvular disease of the heart, and it was therefore assumed that there was no distinct atheroma of the cerebral vessels present.

The case was stubbornly fought before Judge D. J. Kenefick, of Buffalo; Mr. Clarence Bushnell, appearing for the plaintiff and Mr. Thomas Penney, for the defendant. After an exhaustive presentation of facts by experts on both sides, the jury awarded the plaintiff a verdict of $7,000.00.

The case was essentially one for a jury to determine, as there was a tenable position for both sides to maintain. The finding of the cyst cephalad of the hemorrhage was unexpected and was unaccompanied by any focal symptoms. Its origin or date of development was impossible to determine, except that in all probability it antedated the hemorrhage for a long time. The onset of the paralysis of the left arm and leg was gradual, owing to the slowly increasing hemorrhage into the brain substance at the junction of the arm and leg centers and explained why the lower segment of the left face and tongue were not involved. The hemorrhage was subcortical and consequently did not produce any focal seizures. The paralytic condition closely

resembled a functional or hysterical hemiplegia and without the autopsy the true condition of the brain involvement would have been unknown. This case makes imperative the complete investigation of ante- and post-mortem conditions, where litigation is apt to follow, or where liability is even remotely involved.

479 Delaware Avenue.

CLINICAL REPORT.

Subcutaneous Injection of Paraffin in the Correction of Nasal Deformity.

By EDGAR A. FORSYTH, M. D., Buffalo, N. Y.

IN 1900, Gersuny, of Vienna, began the use of paraffin for the correction of nasal deformities. He found that the paraffin became encapsuled and reported two cases, one of two years' standing with no visible changes in the contour of the nose nor any softening of the paraffin. He mentions also a case in which the patient passed through typhoid fever with a temperature as high as 104°F., and no disturbance of the paraffin resulted other than temporary softening.

The paraffin should have a melting point of 102°F. If it is above the body temperature, it will be carried away by the lymphatics; if too hard, it may cause necrosis. The lump paraffin is too hard and white vaseline is too soft. These two products I had melted together in proportion to secure the desired consistency, about the same as that of vaseline, with a melting point of 102°F. The paraffin is sterilised by heating it at its boiling point for a few minutes before using, which will kill all germs.

For the purpose of injection, I used an antitoxin syringe, filled with the melted paraffin, inverted, all the air forced out, and the needle screwed on. The instrument was placed in hot water until needed. Before making the injection the syringe should be tested to see that the needle is not obstructed; if it is, pass a wire through it. The paraffin is allowed to cool so that it will flow from the syringe in a semi-solid or worm-like condition.

The operation is not a painful one and therefore I did not use any local anesthetic. The only preparation of the patient was to cleanse the skin thoroughly before making the injection. The accompanying photographs, taken before and after the injection, show the result obtained.

P.D., aged 36, contracted syphilis when about 19 years old, which destroyed the cartilaginous septum and caused a sinking

FIG. 1. Before injection.

FIG. 2. Two months after injection.

in of the nose—saddle-back depression as it is commonly called. He said his nose had been deformed for about nine years. Operated on December 31, 1902, inserting needle from above and carrying the point to the lowest portion. As the injection was being made the needle was withdrawn and the paraffin was molded into the desired shape, while soft. While the injection was being made pressure was applied to the upper part of the nose to prevent the paraffin from running into the inner side of the nose and the canthus of the eyes. After a sufficient amount had been injected a compress was placed over the nose and kept on for twelve hours No reaction took place; little or no pain followed the injection.

322 FRANKLIN STREET.

THERAPY OF PURPURA HEMORRHAGICA.—Algin claims that hypodermoclysis of a normal salt solution (up to 2 pts.) proved very effective in arresting the bleeding and controlling the disease.—*International Medical Magazine.*

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine.

Section on Medicine, May 13, 1903.

REPORTED BY WILLIAM IRVING THORNTON, M.D.

The medical section of the Buffalo Academy of Medicine held its regular meeting in the Academy rooms, Buffalo Public Library Building, on Wednesday evening, May 13. The meeting was called to order by Dr. NORMAN L. BURNHAM, who presided in the absence of the regular chairman.

Dr. CHARLES S. JEWETT presented a paper entitled The medical and surgical treatment of Bright's disease. He gave an outline of the medical treatment of the several varieties of nephritis and discussed Edebohl's operation of decapsulation of the kidney. A report of the first recorded autopsy after Edebohl's operation was given.

Dr. P. W. VAN PEYMA congratulated the essayist upon his study of the subject.

DR. J. HENRY DOWD reported a case of Edebohl's operation. The result was favorable.

DR. G. A. HIMMELSBACH urged the use of normal salt solution, subcutaneously or intravenously, to combat the toxemia by hastening elimination. He cited a case where from almost total suppression a patient was made to pass 32 pints of urine in 72 hours, after injecting subcutaneously one pint of normal salt solution.

The meeting adjourned at 9.45. Number of Fellows present, 26.

ABSTRACT.

Modern Therapy of Septic Puerperal and Surgical Infections.

BY ROSWELL PARK, M. D., LL.D., Buffalo, N. Y.,
Professor of Surgery, University of Buffalo.

[*Alpha Omega Delta Bulletin, March, 1903.*]

THE author says that the most efficient measures for the treatment of surgical infections are the various silver preparations, for whose introduction into surgical and obstetrical work we are indebted to Credé, of Dresden. We have been for-

decades looking in vain for an effective antiseptic which is devoid of marked toxic or irritating properties. Allotropic silver (collargolum) seems to offer us the nearest approach thereto. Between this silver preparation, which is so bland, and the silver salts, like nitrate of silver, there are the lactate and citrate of silver, also introduced by Credé, of which reasonably strong solutions can be used upon quite sensitive surfaces without producing much if any disturbance.

Let us first take the aqueous solution of soluble metallic silver (collargolum), which in the strength of 1 to 500 in distilled water makes a somewhat cloudy solution. In this strength it may be used by intravenous injection in cases of severe general or puerperal sepsis, rapidly spreading gangrene, acute articular rheumatism or other serious infections. In fact, solutions as strong as 1 to 100 may be employed, it being desirable to introduce 6 cg. (.9 grain) to 10 cg. (1½ grains) at least. If there be difficulty in injecting it into a vein it may even be given beneath the skin. Unpleasant effects will not be noticed, neither will any immediate relief follow, but the solution thus introduced coming into contact with the blood, which in these cases is swarming with germs, will promptly begin its bactericidal work, whose effects should be manifested after two or three hours by a fall of temperature and amelioration of septic symptoms. Silver used in this way has been of great service in cases of carbuncle and even of acute anthrax. Moreover, its administration may be repeated as often as may seem necessary.

When metallic silver is made into a suitable ointment (unguentum Credé) which, by the way, much resembles mercurial ointment, and is then applied to the skin, there is a rapid absorption of the silver itself with its dissemination into the blood stream and results like those just mentioned. It is simply a somewhat slower method of introducing it into the system. For many years I held and taught that the combination of resorcin, ichthyol and mercurial ointment, which I believe I introduced into surgical practice, was the most effective remedy for the treatment of erysipelas and all similar septic infections. Today I have found but one combination which I think superior for this purpose, and that is the silver ointment, unguentum Credé. I believe that its properties are more marked than those of the ointment which I so long used. No matter what part of the body be anointed absorption takes place readily and promptly, consequently any convenient surface may be medi-

cated in this way. Cleanse the skin thoroughly, smear the ointment freely over the surface, cover the area with oiled silk, and put over this, if comforting to the patient, a warm application to promote absorption. If the surface be not tender, the ointment may be rubbed in. In cases of puerperal sepsis it may be applied over the abdomen or to the inside of the thighs. In erysipelas it should be applied to the affected part.

Lastly, I would speak of the use of lactate and citrate of silver, not only for such purposes as the preparation of catgut, silk, gauze, etc., but in solutions of from 1 to 300 to 1 to 500 for the irrigation of septic cavities, and for such purposes as washing out the peritoneal cavity in cases of tuberculous peritonitis, for which I have repeatedly used it and always with benefit.

In my own experience, in several instances, a flushing of that cavity with a 1 to 500 solution has been of the greatest apparent benefit and has never occasioned any regret. Infected bladders, uterine cavities and vaginas may be advantageously, freely and frequently washed out with similar solutions. When using them one may have the feeling that he is using solutions of greater efficacy and of far less toxicity than any of the mercurial preparations would afford. Therein lies the beauty of these preparations, that in anything like equal strength they are more effective and much less toxic than the mercurial salts.

I often state in my clinic that the good old-fashioned nitrate of silver is not used nearly so much as it should be and prove the strength of my conviction by its general use in 1 to 10 per cent. solutions in pus cavities. Not only is a full germicidal effect obtained but also that stimulation to healthy granulation which the nitrate is well known to afford. All in all, if I could have but one source for antiseptic solutions and applications, I would rather look toward the preparations of silver than in any other direction.

NEVER allow an ice-bag to remain for many hours upon the skin without careful inspection. Very severe frost-bites may occur in patients, particularly when their circulation is impaired, through the agency of such intense cold applied continuously, as is so often done in pelvic and appendicular inflammations and in strangulated hernia.—*International Journal of Surgery.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

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Progress Toward Medical Unity.

THE American Medical Association during its session at New Orleans, May 5-8, 1903, took the most progressive step in its history. The Code of Ethics adopted as an admonitory document in 1847, made mandatory by the surreptitious insertion of a clause in the constitution in 1857, enforced as a blue-law with disastrous results to the profession until 1901, eliminated partially in that year and completely in 1902 from the organic law of the Association, has at last been given a new name, a new form, a new and, we believe, an entirely satisfactory status.

It is unnecessary to review the events leading up to this result. The unfortunate misunderstanding at St. Paul twenty and more years ago; the division of the medical profession in the state of New York; the adoption by the American Medical Association of resolutions explanatory of the code; the enactment of salutary medical laws by the different states; the rapid advances in medical education; the reorganisation of the American Medical Association; the organisation on distinctly non-sectarian lines of societies in affiliation with it; the elimination of the Code of Ethics from the organic law of the national association; the appointment of a committee to revise the eliminated code; conferences for the reunion of the profession in New York State; the report of the committee on revision of the eliminated code; the submission of a substitute set of "Principles"; the appointment of conference committees; the submission of the final report and its unanimous adoption, make one of the most interesting and important chapters in the history of American

medicine. History, however, is of yesterday; we are interested, today, only in the precise results of the New Orleans meeting. What has been done?

The answer should relate first to the Code itself. The changes in this document were many, those of major importance being the following:

First.—The title "Code of Ethics" was dropped and that of "Principles of Ethics" was substituted, the house of delegates thereby relieving the document of even a verbal resemblance to a statutory enactment.

Second.—A preamble was adopted, stating explicitly that "the American Medical Association promulgates as a suggestive and advisory document" the statement of principles that followed. This preamble was adopted separately with the distinct declaration by vote that it was to be the preamble of any statement of ethical principles which might subsequently be agreed upon. The house of delegates thus specifically determined not only that the Code was finally and definitely out of the organic law, but that it was out to stay out. This point having been definitely and emphatically determined the exact phraseology of the principles subsequently to be adopted became a matter of relatively little importance.

Third.—The restrictive clause relating to consultations was entirely eliminated—an act by which the long standing and offensive barrier to individual liberty in the matter of professional associations is finally and definitely removed.

Fourth.—The importance of medical organisation was emphasised while no attempt was made to define who were or were not eligible to membership in subordinate and affiliated societies, except that they must be practitioners of medicine under the law. This action by the house of delegates was really made necessary to give ethical sanction to the active work of organisation that its official representatives are stimulating and effecting in several states.

Fifth.—The adjustment of ethical questions was relegated to the state associations and to their constituent societies, which are invested with the largest discretionary power in such matters.

Sixth.—All suggestions for the guidance of the public in its relations to the profession were stricken out.

So much for the "Code" itself—or rather for the "Principles" as the new document must now be designated. There were, however, other results of equally striking importance.

The long and bitter controversy that was expected did not come off. The report of the committee was presented and Dr. Reed offered a substitute for the Code that the committee had published as its report. The house of delegates very promptly adopted the preamble presented in the substitute whereby any document that might later be agreed upon would be purely advisory. Thereafter agreement became easy. The conference was held without serious differences arising and with the result that additional changes were made. When, finally, the completed document reached the house of delegates it was adopted with manifestations of enthusiasm rarely seen in a deliberative body. There were not only sighs of relief, there were shouts of joy, that the troublesome question was out of the way.

The action was distinctly expressive of the sentiment of the medical profession of the country. Local conditions in the state of New York were not taken into consideration. There was no question of expediency. What was done by the house of delegates was manifestly that which in its judgment was best for the profession, without reference to incidental or extraneous considerations. The final result, it seems to us, could not have been better devised to solve the problems awaiting adjustment in the state of New York, as well as the problems of medical organisation of the entire country.

THE House of Delegates did unusually good legislative work and by its industry and practical application demonstrated the wisdom of its creation. Dr. Frank Billings made an admirable presiding officer. His dignity of bearing and good judgment guided the house through eventful work without friction or disturbance. The president-elect, Dr. Musser, of Philadelphia, not being present could not be installed, so under the rules the house directed Dr. Billings to continue in office until the session of 1904 convenes. It is not probable that hereafter the election of an absentee will happen.

THE changed attitude of the association regarding the code of ethics is due to the persistent efforts of Dr. Charles A. L. Reed, of Cincinnati, who some time ago determined, if within his power to prevent, that no obsolete rules of personal conduct should longer be carried on the statute books, particularly as nobody pretended to live up to them. Dr. Reed's substitute introduced at New Orleans gave him the lever-hand in the race, and made

it impossible for any action to be taken that did not receive the approval of him and his inclining.

It is very important that only experienced men be sent to the house of delegates. Those unfamiliar with the rules are prone to delay action or provoke unwise legislation. It is a good plan to return the efficient men for at least a few terms, or until the rules and precedents become sufficiently established to ensure harmonious working of legislative methods.

The registered attendance at the meeting was stated at a fraction over 2,000, which has become the accepted average within the last few years. This, of course, means that at least 2,500 visitors were present. The arrangements were admirable and all were well pleased, thanks to the efficiency of the committee with Dr. Isadore Dyer at its head.

The medical editors' dinner at Antoine's, Monday evening, was unusually well ordered as to decorations, menu and service. A vocal quartet of negroes gave a novelty to the entertainment and added enthusiasm to the occasion. The president, Dr. Winslow Anderson, of San Francisco, in announcing the toasts stated that in each instance no previous notice had been given the speakers, but, even so, the responses were spirited and in many instances eloquent.

Rubber-Stamp-Circular Degrees.

And now, for the small sum of $10, the tuft-hunter may have added to his name the imposing degree of doctor of laws, with a handsome parchment, "suitably engrossed," giving him the right to add to his name and his various other titles and degrees, the letters LL.D. This is easy of accomplishment, for the Nashville College of Law, of Nashville, Tenn., is sending out circular letters to physicians offering the degree for sale. The circular is filled in with a typewriter and signed with a rubber stamp, typical of the honor to be conferred on purchasers, and is as follows, being addressed to "Hon. John Brown, M.D." John Brown isn't the name, but it will do as well as any other:

In accordance with a time-honored custom, the college will confer a title upon some worthy educator or jurist of your state, by bestowing the Degree of Doctor of Laws, LL.D., and in

harmony with the annual custom established by the leading American and European colleges, after long continued usage, your name has been suggested as one from your state of ability, morality and integrity, and worthy of this distinction, and upon the presentation of the proper application and data, the title will be conferred at the coming meeting of the board of trustees. The desire of the corporation is that this honorary distinction be conferred only upon those who may, in some way, prove an honor to himself, an honor to his country, and an honor to the college. There are no fees attached, as it is purely honorary, except the cost of the issuance of the diploma and engrossing name in same. The college diploma bears a facsimile of the corporate and state seal, is lithographed upon parchment, carefully prepared sheepskin, suitable to frame and place in the home or office, and is a testimonial of honor, prestige, efficiency and worth.

Please fill out the enclosed blank application and return to this office for filing purposes to be kept in the records of the college for future reference, and enclose check for the incidental fee to cover expense of the issuance of the diploma and engrossing your name in same, and it will be placed to your credit upon the books of the college, and if, for any cause, the title be not conferred, the incidental fee will be returned to you by the corporation. However, should you be elected an honorary alumnus of the college, the trustees, the faculty and myself shall be pleased to have you send the institution a large portrait of yourself, properly framed, and suitable to hang on the walls of the college.

We shall take pleasure in sending you a copy of our latest college catalogue, as soon as it comes from the press, containing announcements, official rules and regulations of the college. It sets forth the policy of the college, courses of instruction and full information concerning the institution in a very clear light.

Extending to you personally, and on behalf of the college, our earnest congratulations as a coworker in the domain of the great profession, believe me, my dear sir,

Faithfully yours,
Wm. Farr, Dean.

P.S.—The May meeting of the board of trustees will be held the latter part of the present month, and your record of data, etc., should be received in advance of the meeting. You will be duly notified of the action of the board, and if elected to a degree, your diploma will be expressed to you, otherwise, check returned.—R.S.V.P.

The blank referred to for filing purposes is ludicrous. Here are the questions a candidate for the $10 degree must answer as necessary qualifications to his fitness of the $10 honor: "Name in full; P. O. address; age; married or single; nation-

ality; place of birth; profession or avocation; are you a graduate? if so, what course or courses? Where, when and how long did you attend? Have you taken a course by the correspondence method? What degree, if any, do you hold? If so, conferred by what college? When were the degrees conferred? If not a graduate, state time studied in years. When and where admitted to your profession? State experience in years as a member of your profession? What law books, if any have you read? Do you believe in the coeducation of the sexes in a college of law? What public offices if any have you held? What interest do you take in educational affairs? What literary position, if any have you held? Name the church of your choice? What is your political belief in national affairs? Are you a member of any secret society? What? Do you take daily exercise? Do you have good health? Are you the author of any book, thesis or literary article? If so, name them. How much time do you devote daily to study. Was Pope right in saying, drink deep or taste not of the Pierian spring? What magazine, if any, do you read on American legal lore? Incidental fee enclosed, $10."

Just how these questions apply to a candidate's fitness for an honorary degree is hard to say. The JOURNAL has no hesitation in saying, and in fact it has the say-so of the physician who received the circular invitation to buy an honorary degree, that the only qualification he possesses is the fact that he is able to spare the $10 for the "incidental fee." Other than that he has done nothing to warrant the conferring of an honorary degree by a standard college or university. He is not a lawyer, knows nothing about law, save as it applies to medicine he, is not an author of distinction, nor is he an eminent educator. He might come under the $10 rule of the Nashville College of Law by reason of the fact that he takes daily exercise, that he has held literary positions and that he has a leaning toward a certain religion and votes a straight ticket at National elections. But think of the terrible mistake a prospective purchaser might make if, when all swelled up with pride over the distinction of being chosen by so eminent a rubber-stamp institution as the Nashville College of Law for one of its honorary $10 bargain-day degrees, he should answer the Pope query in a manner calculated to chill the heart of the board of trustees. Or possibly he might have grammatic scruples about replying to the question concerning the "coeducation of the sexes" But maybe

it would be all right in any event, no matter how poor the answers, if the check "for engrossing" were good. It would be interesting to know how many honorary degrees this institution confers this spring at $10 per.

University of Buffalo.

THE fifty-seventh annual commencement of the department of medicine, U. of B., was held on Tuesday, May 6, 1903. The graduating exercises were held in the Teck Theater at 11 o'clock a.m., and were opened with prayer by the Rev. J. A. Regester of St. Paul's Cathedral. Dr. John Parmenter, secretary of the faculty, presented the names of the candidates to the chancellor and Dr. Matthew D. Mann, dean of the faculty, administered the hippocratic oath. The degree of doctor of medicine was conferred by the Hon. Wilson S. Bissell, chancellor of the University, upon the following-named candidates:

Clarence Beals, John Lewis Bishop, Bert John Bixby, Charles Lisle Bond, Elliott T. Bush, William Henry Callahan, Frank Oliver Cole, John A. Conway, Carlos Emmons Cummings, A. B.; Spencer Arthur Drake, Edward Henry Drozeski, Clarence Christopher Duchscherer, James E. Eisenhart, Ph. M.; George Louis Fischer, David Earl Fraser, May Gibson, Edward Eugene Gillick, Walter Speisser Goodale, James McAndrew Happell, Glenn H. Hardy, Albert Jabesh Harris, B.S.; Lawrence Aloysius Highland, A.B.; Frank Jones, Leon M. Kysor, James Russell Lowell, John Wesley Munro, Albert William Palmer, Frederick James Parmenter, Fred Cole Purcell, Edwin David Putnam, Hyatt Regester, Edwin Albert Riesenfeld, Carroll Julian Roberts, Hibbert Rice Roberts, Edward Wesley Roos, Burton Thorne Simpson, Edward Hugo Storck, Chris Lester Suess, George Calvin Swerdfeger, Willard Hall Veeder, L. Edward Villiaume, John Lewis Washburn, Ph.C.; Harry Milton Weed, Thew Wright, A.B.; Shin Yokoyama, M.B.

The sixteenth annual commencement of the department of pharmacy and the eleventh annual commencement of the department of dentistry, were held at the same time and under similar ceremonies. The former class numbered 24 and the latter 68.

The honor members in the class of medicine were as follows:

Hyatt Regester, Leon M. Kysor, Elliott T. Bush, Thew Wright, A.B.; Harry Milton Weed, Burton Thorne Simpson,

Chris Lester Suess, Edwin David Putnam, Bert John Bixby, Edward Henry Drozeski, Frederick James Parmenter, Carlos Emmons Cummings, A.B.; John Lewis Washburn, Ph.C.

The Reverend R. R. Converse, D.D., of Rochester, delivered the address to the graduates.

The exercises were interspersed with musical selections and closed by a benediction.

ALUMNI ASSOCIATION.

The twenty-eighth annual meeting of the alumni association of the medical department was held on commencement day. In the morning the classes of '53, '63, '73, '83, and '93 held reunions.

The Alumni Association met in the university building in the afternoon. Professor William T. Sedgewick of the Massachusetts Institute of Technology was the principal speaker. His subject was: The protection of public health by filtration of municipal water supplies. His address was discussed by Colonel Thomas W. Symons, Dr. W. D. Greene, Dr. Herbert M. Hill, Dr. Herbert U. Williams, Dr. William R. Campbell, Dr. Arthur W. Henchell, and Dr. George Fell.

The Alumni Association elected these officers: president, A. W. Henchell, '89, Rochester; first vice-president, Fridolin Thoma, '87, Buffalo; second vice-president, Henry T. Benham, '90, Honeoye Falls; third vice-president, Jane W. Carroll, '91, Buffalo: fourth vice-president, George A. Himmelsbach, '91, Buffalo; fifth vice-president, C. J. Reynolds, '90, Buffalo; secretary, Thomas H. McKee, '97, Buffalo; treasurer, Herman K. DeGroat, '97, Buffalo. Board of trustees, D. A. Currie, '64, 1903, Englewood, N. J.; A. W. Bayliss, '89, Buffalo; William Warren Potter, '59, 1905, Buffalo; D. W. Harrington, '71, 1906, Buffalo; F. H. Moyer, '72, 1907, Moscow. Executive committee, Albert T. Lytle, '93, chairman, Buffalo; Grover W. Wende, '89, Buffalo; Franklin W. Barrows, '93, Buffalo; A. W. Henchell, *ex-officio*, Rochester; John Parmenter, *ex-officio*, Buffalo.

The Director of Charities and Correction in Philadelphia.

IN PHILADELPHIA there has been announced an appointment, the principle of which might well be followed by many another city in this country with advantage to itself and credit to a profession, which has done and is daily doing more for

humanity than any other class. The City of Brotherly Love has so far reformed in its civic side as to see wisdom in appointing Dr. Edward Martin as Director of Charities and Correction; and this step in the right direction is made by Mayor Weaver, a gentleman who has added glory enough to his administration by this one act to last him for all time, if he never did another really meritorious act during his term of office.

In Philadelphia, the Director of Charities and Correction controls the general municipal management of health and sanitation and there could not have been selected a more eminent scientist or a more fearless and honest man than Dr. Martin for the place which, by this appointment, has been removed beyond the grasp of the politicians who have done much to add shame to the municipal reputation of an otherwise delightful city. Affairs will be conducted in a radically different manner under Dr. Martin's guidance than they have ever been handled before in the history of the city; and as evidence of this fact it is only necessary to mention the names of the six gentlemen whom he invited to serve with him as an advisory board: Drs. S. Weir Mitchell, Hobart Amory Hare, J. William White, Charles Penrose, John H. Musser and J. M. Anders. The medical profession does not contain more eminent names than these and the fact of their acceptance of what will be a labor of love speaks well for their citizenship and their civic pride. It shows, too, that they will not pose as figureheads; it means they will bring to the aid of Dr. Martin in his work of purification, wide experience, earnestness of purpose and deep scientific knowledge, and that Philadelphia will be the most cleanly city in America.

Aside from the merit of the appointment of Dr. Martin and the public spirit shown by his associates there is still a more important significance to be attached to the event, and that is the example set by these eminent medical men in entering public life. There are too few physicians who take an active part in civic government in the United States. In Europe and in South America we find in important public office, in diplomacy, in statecraft, in education, in public health, the most prominent figures to be those of physicians; in this country the great majority appear to be willing to cease their efforts for public office when they secure appointment as postmortem examiner, or coroner, or physician to a public institution. The cessation of effort at the acquisition of these offices is neither praiseworthy nor elevating. The offices mentioned could not very well, in

this part of the country at least, go to any but a physician. As a rule, coroner's offices are rank with inefficiency. This has been changed in Erie County and other sections are preparing to follow us in the work of improvement of service and morals in this office.

Buffalo has had a physician as mayor and in spite of party prejudices and irrespective of political soreness, which is bound to exist, none can gainsay that Dr. Diehl made an excellent and high-minded executive. That he made mistakes, is possible; but they were the innocent mistakes of one who is more of a gentleman than a pot-house politician and who served the people as he thought they should be served, honestly and to the best of his ability. He did what he thought was right and his administration was clean and firm in principle.

It has been said that physicians are too busy to go into politics. Rather let it be said that they are too honest as a body to mix up in the trickery of ward deals. They should not be too busy to give some of their time to the work of elevating the cities in which they live or the states of which they are citizens. Physicians by education and experience are versed in the intricacies of human nature. They are warm-hearted and sympathetic friends, but cold and calculating reasoners. That is the secret of the success of the continental and South American physician in public life. As a profession we are too timorous. Let us push forward the best men in medicine and the records they make in public life will lift up the younger men, and give them examples of a lofty public spirit which they will not hesitate to strive to emulate. And, incidentally, it will increase public respect for the profession as a whole.

The State Consumption hospital at Raybrook received a substantial appropriation from the last legislature, and, we are happy to learn, Governor Odell has approved the full amount granted. This is as it should be, and enables the trustees to proceed along lines that will place the State of New York where it belongs, in the front rank of commonwealths in dealing with this dread disease that annually sweeps away 13,000 of our inhabitants. The temptation is very strong for a governor to reduce many items in the annual appropriation bills, and very properly so, but in this instance Governor Odell has shown himself to be in touch with the most progressive spirit of preventive

medicine, and deserves the thanks of every physician and all enlightened citizens.

THE JOURNAL cannot refrain making a brief reference in this issue to a notable example of decency of purpose on the part of the publishers of *Everybody's Magazine*, the June number of which has been placed on sale just as we are going to press. This magazine has changed hands and is now owned by two men who have spent years in magazine work. Heretofore it was the property of a big department house and, like the majority of magazines, was publishing everything in the way of advertising which was paid for, chief and most objectionable of which were the patent medicine advertisements. In the announcement of the policy of the magazine under the new management this statement is made:

It is our intention to insert only high-grade advertising in our magazine. . . . We shall exercise a scrupulous censorship over all the advertising pages. Various lines of patent medicine and other curative and objectionable advertising will be declined, even when offered by well-known and reliable firms. . . . We inherit a few contracts which we shall not accept after they have expired. Whether it is desirable to publish patent medicine, curative, and certain kinds of financial advertising in a magazine is a question for each publisher to decide. . . . . June is not a heavy month for advertising, but we have declined $900 worth of that kind of business—and we could use the money."

This is honest and refreshing and betokens a cleaner line of advertising. In a paper which has been prepared for the JOURNAL on Medical Fakes and Fakirs, which was unavoidably crowded out of this issue, but which will be published next month, the question of disgusting and dishonest medical advertising in the monthly magazines is taken up at length; but the honesty and fearlessness of the new owners of *Everybody's Magazine* are worthy of especial mention at this time, as indicating that because a magazine is sold for ten cents it need not necessarily be a garbage mess so far as its advertising pages are concerned.

Truth, the new weekly newspaper which Mr. Mark S. Hubbell has given to the public in Buffalo, has already set the pace for the daily newspapers in many matters of local interest, and in his last issue he raises the standard of purity of advertising which can be followed by the daily newspapers without much

monetary loss to themselves, and with much improvement in the tone of their business columns. Mr. Hubbell boldly declares against the fakes, fakirs and the criminal abortionists.

The Farbenfabriken of Elberfeld Company, of New York, is forcing the issue all along the line in regard to drug substitution. There appears to be an organised attempt on the part of certain persons to supply druggists with bogus phenacetin, trional, aristol, and other Bayer products, the druggist being tempted by the statements that these goods are genuine, but contraband, and therefore can be sold at a much cheaper rate. It has been observed, however, that these bogus products which are sold in counterfeit boxes, are, for the most part, composed of acetanilid.

The company referred to is bringing action in the Federal courts against all persons whom it detects in the unlawful practice of substituting as related to any of the products which it manufactures or controls.

Recently the campaign against infringers was opened in Tennessee. Bills have been filed within the last few weeks against druggists in Memphis, Nashville, Chattanooga, Knoxville and Dyersburg, and in most of these cases the defendants have already thrown up their hands and asked for quarter. The remainder, it would seem from present indications, are likely to follow suit and settle upon the best terms they can secure, after having examined the record made in the United States court for Tennessee in the case which has just been prosecuted to a conclusion against J. T. Hampton, of Cleveland, Tenn.

It has been the policy of certain pharmaceutical journals, in order to shield unscrupulous druggists, to state that the efforts to suppress substitution are simply an attempt to gain free advertising for certain products in the medical journals. It is hardly necessary to say that such standard drugs as phenacetin, sulphonal, trional, and aristol require no advertising to make them known to the physician. The sole object is to compel the druggist to dispense these products when called for on a prescription, and not the bogus substitutes which he has been obtaining from illegitimate sources.

The house referred to is to be commended for the thoroughness with which it is pursuing the offenders, and it is to be hoped that the full penalties of the law will be meted out to those who are proven guilty.

The Regents of the University of the State of New York, at their regular meeting, held at Albany, May 21, 1903, made appointments of state medical examiners as follows:

Representing the State Medical Society—Dr. William Warren Potter, Buffalo; Dr. William S. Ely, Rochester; Dr. Maurice J. Lewi, New York.

Representing the Homeopathic Medical Society—Dr. John M. Lee, Rochester; Dr. J. Willis Candee, Syracuse; Dr. George E. Gorham, Albany. Dr. William M. S. Fiske, Brooklyn, was appointed in the place of Dr. William Morris Butler, Brooklyn, resigned.

Representing the Eclectic Medical Society—Dr. L. H. Smith, Buffalo; Dr. O. W. Sutton, Bath; Dr. H. H. Nichols, Worcester.

Governor Odell has signed Mr. Sherry's bill making it a misdemeanor to distribute samples of drugs or patent medicines in such a way that children may get them.

In the Journal for April, 1903, page 691, we made reference to a fatal poisoning caused by house-to-house distribution of samples of medicines. This law is evidently aimed at such practices, which must now stop.

PERSONAL.

Dr. Henry Jones Mulford, of Buffalo, announces the removal of his office and residence from 405 Delaware Avenue to 143 Allen Street. Hours: 9 to 12 a.m.; 2 p.m.; Sunday at noon. Bell telephone, Tupper 772. Practice limited to diseases of nose, throat and ear.

Dr. John Chalmers, of Buffalo, announces the removal of his office and residence from 154 Chenango Street to 321 West Ferry Street. Hours: 8 to 9 a.m.; 2 to 3 and 7 p.m.; Sunday, 1 to 3 p.m.

Dr. Max C. Breuer, of Buffalo, announces the removal of his office and residence, from No. 1 North Pearl Street, to 33 Allen Street, corner North Pearl Street. Hours: 9 to 10 a.m.; 2 to 3 p.m. Evening by appointment.

Dr. Franklin W. Barrows, of Buffalo, announces his removal from 45 Park Street and 464 William Street, to his new resi-

dence and office, No. 1364 Michigan Street. Telephones, Bryant, 3911; Frontier, 26431.

Dr. Joseph Burke, of Buffalo, has removed his office and residence from No. 388 Franklin Street to No. 888 Main Street. Hours: 1 to 3 and 7 p.m. Practice limited to diseases of the thoracic and abdominal viscera.

Dr. Grosvenor R. Trowbridge, of Buffalo, has removed his office from The Wellesley, Franklin Street, to 1349 Main Street. Hours: 8 to 9; 1 to 3 and 6 to 7. Telephones: Bell, Bryant, 762; Frontier, 637.

Dr. A. L. Gnichtel, of New York, has removed to 257 West 44th Street. Hours: Until 10; 1 to 2; 4.30 to 7. Telephone, 3203-38th St.

Dr. George F. Cott, of Buffalo, has removed his residence from No. 160 Woodlawn Avenue to No. 330 Depew Avenue, Central Park. His office still remains in the Mooney-Brisbane building. Practice limited to diseases of the ear, nose and throat.

Dr. Richard H. Satterlee, of Buffalo, has removed from The Touraine to his former residence, 187 Delaware Ave. Hours: 9-1; 3-4. Practice limited to diseases of the eye. Telephone, Tupper 509.

Dr. James A. Gibson, of Buffalo, has removed his residence from 533 Franklin Street to The Touraine, Delaware Avenue, corner of Johnson Park. His office remains in the Mooney-Brisbane building.

Professor C. A. Ewald, of Berlin, addressed the Buffalo Academy of Medicine at a special meeting held Wednesday evening, May 20, 1903. Subject: The early diagnosis of gastric cancer. Dr. A. L. Benedict entertained the guest and members at luncheon after the meeting.

Dr. Charles G. Stockton, of Buffalo, tendered a reception to Professor Ewald, of Berlin, and the Fellows of the Academy of Medicine, at the Saturn Club, Wednesday, May 20, 1903, from 3 to 4 p.m.

Dr. Harvey R. Gaylord, director of the Gratwick Laboratory, University of Buffalo, who has been ill for some weeks with typhoid fever, is reported to be convalescing satisfactorily.

Dr. Lewis S. McMurtry, of Louisville, delivered the address on surgery before the South Carolina Medical Association, at its recent meeting in Charleston. He chose for his subject, Fibroid tumors of the uterus and their complications.

Dr. Chauncey Pelton Smith, of Buffalo, delivered an address before the Buffalo Historical Society in its new building Sunday afternoon, May 17, 1903, the subject of which was, Some historical curiosities of medical practice. This was one of the regular Sunday afternoon series of popular lectures and attracted an interested audience.

Dr. Eugene Wasdin, Surgeon U. S. public health and marine hospital service, and Mrs. Wasdin, have taken apartments at The Touraine, Buffalo. Dr. Wasdin has been stationed at Buffalo during the past two years and will be remembered as one of President McKinley's physicians.

OBITUARY.

Dr. Theodore H. Boysen, of Egg Harbor City, N. J., a graduate of the University of Buffalo, class of 1874, died at his home March 12, 1903, of chronic valvular disease of the heart, aged 49 years. He was born in Rogersville, O., January 14, 1854, and was the son of Dr. Otto Boysen, who afterward removed to Buffalo and engaged in the practice of medicine. After graduation, Dr. Theodore Boysen began the practice of his profession in this city, remaining for two years, when he removed to Egg Harbor City. Dr. Boysen became a leading practitioner in his locality, where he acquired a large clientèle and commanded the universal respect of the community. He is survived by a son, Dr. Theodore H. Boysen, Jr., who will assume his father's practice.

Dr. John McBeth, of Wales Center, N.Y., died at his home in that village, February 16, 1903, aged 80 years. He was born at Dalhousie, Can., September 25, 1822, of Scottish parentage.

He came to Wales Center in 1843, where he studied medicine with his brother, Dr. Gilbert McBeth. In 1846, the latter removed to Buffalo, leaving his practice in the hands of his brother John. Gilbert McBeth died on his way to California in 1849.

Dr. John McBeth, from the year 1846, until near the close of his life, continued to practise medicine at Wales Center, where he enjoyed a high reputation for professional skill and personal integrity. He was elected to the board of supervisors in 1860, and served as a member for two terms. He became assistant surgeon of the 67th regiment, N.Y.N.G., and served with his command in the Gettysburg campaign of 1863. Dr. McBeth married Clara P. Tabor, August 11, 1871, and she died February 23, 1876. He did not marry again and is survived by an only child, Mrs. William Foss, of Wales Center, and a brother, James McBeth, of Illinois. A sister, Mrs. Helen Tobias, of Buffalo, has died since the decease of Dr. McBeth.

Worthington C. Miner died suddenly at his home in Buffalo, April 30, 1903, aged 42 years. His death came as a great shock to the community and was attributed to apoplexy. He was the son of Dr. Julius F. Miner, the distinguished Buffalo surgeon, who for many years was professor of surgery at the University of Buffalo, and for nearly twenty years editor of the Buffalo Medical Journal. Worthington Miner graduated at Hamilton College and then began the study of law. He was admitted to the bar soon after he reached his majority and in a short time became associated with Ansley Wilcox in the practice of law. He was easily one of the most prominent of the younger members of the bar and with his partner enjoyed a very large practice.

Mr. Miner was a member of the Buffalo Fine Arts Academy and was the treasurer of the Kindergarten Association from the time of its organisation until the day of his death. For a number of years he was secretary of the Buffalo Club.

He is survived by a widow and three children.

Dr. Guy Bryan Miller, who died at Paris, France, April 7, 1903, was born in New Rochelle, February 23, 1872, and was the son of Charles Griffin Miller. He was graduated from Yale University in 1894, and from the College of Physicians and Surgeons, Medical Department of Columbia University, in 1898. He served two years in St. Luke's Hospital, New York, and

studied another two years in Vienna. From there he went to Paris in 1892.

Dr. Miller was well known in Buffalo. The funeral was held from the house of Mr. Frank Hamlin on North Street, the Rev. H. B. Master officiating. The burial was at Forest Lawn.

Dr. Thomas G. Morton, of Philadelphia, died at Atlantic City, May 20, 1903, aged 67 years. His death was sudden, after but two days' illness, and was reported due to cholera morbus. Dr. Morton was one of the prominent surgeons of Philadelphia and his loss to the profession and the city is distinctly a great one.

SOCIETY MEETINGS.

The National Confederation of State Medical Examining and Licensing Boards held one of the most important meetings in its history at New Orleans, May 4, 1903. A special feature of the preliminary exercises was the address of Dr. Rudolph Matas, of Tulane University, who not only welcomed the visitors in appropriate terms, but presented a comprehensive review of the whole field of state licensure, that cannot fail to benefit the cause of higher medical education and advance the interests of state control. Other papers and addresses of great interest were likewise presented, and when the proceedings are published attention will be attracted to important features developing along the lines of state examinations for license to practise. Dr. Henry Beates, Jr., of Philadelphia, was elected president and Dr. F. A. Larue, of New Orleans, was chosen secretary, Dr. Suiter having declined to serve further in the latter capacity.

The Medical Society of the County of Erie will hold its regular semiannual meeting on Tuesday, June 11, 1903, beginning at 10 o'clock a.m. The place of meeting is in the parlors of the Y.M.C.A., corner of Pearl and Mohawk Streets, Buffalo. The president, Dr. Ernest Wende, and the secretary, Dr. Franklin C. Gram, are preparing a program that should prove of interest to physicians, lawyers, clergymen and pharmacists, all of whom are invited to attend.

The sixth triennial congress of American Physicians and Surgeons was held at Washington, D.C., May 12-14, 1903. It is com-

posed of sixteen constituent special societies, among which is the American Neurological Society, which was presided over by Dr. James Wright Putnam, of Buffalo. All of the societies attended to their own programs in the morning of each day and in the afternoon the general sessions of the congress were held. A number of distinguished foreigners were present by invitation, among whom were Prof. J. von Mikulicz-Radecki, of Breslau, Prof. C. A. Ewald, of Berlin, Prof. Hans Kehr, of Holberstadt, Prof. Hermann Tillmans, of Leipsic, and Mr. B. S. A. Moynihan, of Leeds, England. It is a matter of common remark that the sixth congress was quite the most successful gathering in the history of the organisation.

The Buffalo Academy of Medicine held meetings during the months of April and May, 1903, as follows:

Section on Medicine.—Tuesday evening, April 28. Program: Report of twenty cases of pernicious anemia, Charles G. Stockton and Albert E. Woehnert.

Wednesday evening, May 13. Program: The medical and surgical treatment of Bright's disease, Charles S. Jewett.

Section on Surgery.—Saturday evening, May 2. Program: Surgical experiences in the Philippines, Maj. Charles Lynch, Surgeon U. S. Army.

Section on Pathology.—Tuesday evening, May 19. Program: Infectious endocarditis, with report of cases, Albert E. Woehnert.

Section on Obstetrics and Gynecology.—Tuesday evening, May 26. Program: Should the uterus be removed when operating for pus tubes? Matthew D. Mann; Prophylaxis in obstetrics, Ludwig Schroeter.

COLLEGE AND HOSPITAL NOTES.

"Dr. McMurtry's Infirmary" is the title of a handsome booklet of 16 pages, well printed and beautifully illustrated. It is descriptive of one of the best private hospitals in the country, owned and administered by Professor Lewis S. McMurtry, A.M., M.D., of Louisville, Ky., and which is located at 1912 Sixth Street in that city. The hospital is devoted exclusively to the treatment of diseases peculiar to women, and for cases requiring abdominal surgery; it is a large, double house, three stories in height, standing upon high ground, in the choicest residential district of Louisville, has spacious grounds, modern plumbing, steam heat, bath rooms, open grates, and combines all the elements of a first-class modern home, with the added

conveniences necessary to the treatment of the class of patients that it receives. There is nothing lacking that a liberal purse can command or that skilful surgery can supply, to make it an ideal place for patients who seek speedy relief and prompt cure. The hospital has a training school for nurses, and its graduates are among the finest young women in the south, cultivated, kind-hearted and skilled in their profession. The brochure itself is one of the most attractive hospital announcements we have ever seen, and will repay reading by any physician or patient.

RESIDENT physicians at the Buffalo hospitals have been appointed as follows: General Hospital, Drs. Edward H. Drozeski, Hyatt Regester, Thew Wright, and Frederick J. Parmenter. Erie County Hospital, Drs. Elliott Bush, Carroll J. Roberts, and Bert J. Bixby. Homeopathic Hospital, Drs. Joseph C. Wallace and Walter L. Williams. The latter are recent graduates in medicine from the Hahnemann Hospital Medical College of Philadelphia.

THE Buffalo General Hospital has just issued its forty-fourth annual report. It covers the year 1902, contains 84 octavo pages, is handsomely illustrated, and is as fine a specimen of the printer's art as we have seen in many a day. The total number of patients treated during the year was 2,320, and the total expenditures were $75,925.16. This is a splendid economic showing and indicates not only skilful treatment of the patients committed to its care, but competent financial and business management of the affairs of the hospital. The report is printed by the A. T. Brown press.

BOOK REVIEWS.

DISEASES OF THE SKIN. Their Description, Pathology, Diagnosis and Treatment. With special reference to the Skin Eruptions of Children and an Analysis of 15,000 cases of Skin Disease. By H. RADCLIFFE CROCKER, M. D. (Lond.), F. R. C. P., Physician for Diseases of the Skin in University College Hospital; Honorary Member of the American Dermatological Society; Examiner in Medicine, Apothecaries' Hall, London. Third edition, revised and enlarged. With 4 plates and 112 illustrations. Octavo, pp. 1,466. Philadelphia: P. Blakiston's Son & Co. 1903. [Price, $5.00.]

It is now ten years since the last edition of Crocker's Diseases of the Skin was issued. This period has been fruitful con-

cerning the science of medicine in general and especially so as relates to dermatology. The necessity has therefore arisen of bringing forward what is new in reference to the subject. Besides, the last edition has been out of print for a number of years, and it was time that it should reappear with up-to-date additions. It is true that the work has been in some sense supplanted by American works, notably those of Hyde and Stelwagen; we, nevertheless, welcome the new edition on account of its former prestige and the certainty that, in its new form, it will prove of value to the profession. The new edition is large, containing 1,466 pages, about twice the number in the old edition, making the volume too heavy and somewhat unhandy, although this could hardly have been avoided considering this vast accumulation of new material. Still, the publishers might have prevented this objection by issuing the work in two volumes, as was done in the case of the foreign edition.

It would almost seem that the authors must have rewritten the entire book, for not alone have new subjects been exhaustively treated, but many admirable changes have been made in the description of old diseases, largely in the way of amplification, a necessity of growing out of the old order of things. In certain instances, there is a lack of conciseness and point, but the bulk of the work is perhaps sufficiently excellent to excuse this single blemish.

The work of revision must have been laborious, almost equal to the original compilation. References are quite numerous, so that the reader need not necessarily confine himself to the author's views. Of course, many of the subjects discussed are sure to be much more interesting to the specialist than to the student and general practitioner. For instance, under the title of lichen variegatus, the author has included the following affections: parakeratosis variegata (Unna), dermatitis variegata (Boeck), psoriasiform and lichnoid exanthum (Neisser and Jadasohn), erythrodermie pityriasique en plaques (Brocq), and pityriasis lichenoides chronica (Julensberg). There can be no doubt that these several conditions are closely allied one to another, but there are still many points concerning which questions hard to answer have arisen, although the able paper of Fox and Macleod has thrown much light upon the subject. They claim that the original term parakeratosis variegata is most fitly chosen, saying that the primary lesion is not always a papule. This view, of course, conflicts with Crocker's present definition, viz: lichen variegatus.

We notice that Crocker has dropped the name of hydroa herpetiformis conferred by Tilbury Fox, and has written the name of dermatitis herpetiformes over that interesting disease. He wrongfully gives to Fox the right of discovery, for the full honors in this instance are due to Duhring for his classic exposition.

Leukemia cutis is treated under the separate headings of

leukemia cutis, chloroma and pseudoleukemia cutis. This seems unnecessary, as the changes of the blood are little understood and the pathology of the skin changes are so much alike that it would seem that these cognate conditions might all be grouped under one heading. In treating seborrhoic dermatitis, under the heading of seborrhoides, the author has followed French authority. While citing Unna's opinion and that of Sabourand, and giving their chief points, he, nevertheless declares that it must be left to the future to show which interpretation is correct.

The histology and pathology of the various diseases of the skin, which were so carefully considered in the former edition, have not alone been amplified, but all those relating to new cutaneous diseases are elaborately discussed—like blastomycosis, due to the blastomycites, which has been inoculated into animals and from the lesion fungi have been inoculated and cultivated. In regard to the streptococcic organ of impetigo contagiosa, the author, who was the first to describe the organism now proceeds more carefully. It is obvious, he argues, that further research is still necessary, and he suggests that only fluid from unruptured vesicles and media liquid be employed and considers that to continue to make observations on fluid from beneath crusts is so obviously open to error as to be unscientific and a waste of time. He takes up the different clinical forms and lays considerable stress on the impetigo of Bockhart, a variety which we have here lately recognised, as well as another variety, impetigo contagiosa gyrata, which apparently is rarely seen in England, although it is quite common in the United States. He says that the schizomyceties, which includes the bacteria and micrococci, are proving more and more to be the cause of inflammatory disease and granuloma. The psorosperms are no longer to be considered a pathogenic agent in the skin, having proved to be metamorphosed epithelial cells. In comparing the general drug treatment of the last edition with the present, but slight changes appear. The more marked of these apply to mechanical means—electricity clearly leading the march of improvement. The new modes of treatment are fully discussed, notably *x*-ray and the Finsen light. What Crocker says upon these subjects derives, of course, its chief value from the experiences had and the results obtained by others. He advises the use of high tubes with a spark gap of $\frac{1}{2}$-foot while treating diseases of the skin.

A few new illustrations have been added to the previous small collection. The colored one on syphilis has no special value and interferes with the binding. The one on ringworm is much better. The weakest feature of the book consists in its illustrations. However, any criticism upon a work of this character seems almost an impertinence, seeing that it is well known to almost every practitioner as the heretofore standard work in the English language. At one time it had no rival;

but in the absence of new editions, and the strong hold upon the profession taken, in the meantime, by the admirable works of Hyde and Stelwagen, the conclusion is forced that hereafter, as relates to these several authors, the honors must be easy.

G.W.W.

LEA'S SERIES OF POCKET TEXTBOOKS. Diseases of the Skin. A Manual for Students and Practitioners. By JOSEPH GRINDON, Ph. B., M. D. Professor of Clinical Dermatology and Syphilis, Washington University, St. Louis. Large duodecimo, pp. 377. Illustrated with 39 engravings. Series edited by BERN B. GALLAUDET, Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York. New York and Philadelphia: Lea Brothers & Co. 1902.

In this manual Grindon has stated in a plain, terse manner the principal facts of dermatology. We miss, at the outset, the usual description of the anatomy and physiology, which in most textbooks serve to introduce the subject. This, however, may be just as well, since the student can easily obtain all such information from other works. This volume is described in the preface to be complete in its essentials for the use of students, and to be of real value to the physician as a means of refreshing his recollections and posting him to date. The subjects are discussed from a modern standpoint and with a praiseworthy freedom from hackneyed technicalities. The style is concise, the presentation of subjects is clear, and to each one is very properly assigned a special chapter.

The author takes rather singular liberties with recognised classification when he describes seborrhea under anomalies of secretion and pityriasis capitis under inflammation. The illustrations, which are reproductions by the author and Dr. John B. Kieber, are new and while some of them are very fine, others are simply execrable. In our opinion, the mounted chromolithograph, purporting to illustrate this premycosic stage of mycosis fungoids, is of doubtful utility, as it wholly fails to bring out the salient characteristics of the disease. One who should happen to pick up the volume at a bookstore, judging from its tawdry appearance, would probably conclude that he had chanced upon the latest flashy novel. G. W. W.

THE AMERICAN YEAR BOOK OF MEDICINE AND SURGERY FOR 1903. A yearly Digest of Scientific Progress and Authoritative Opinions in all branches of Medicine and Surgery, drawn from journals, monographs and textbooks of the leading American and foreign authors and investigators. Arranged, with critical editorial comments, by eminent American specialists, under the editorial charge of GEORGE M. GOULD, A.M., M.D. In two volumes—Volume I. including General Medicine. Octavo, 700 pages, fully illustrated. Volume II., General Surgery. Octavo, 670 pages, fully illustrated. Philadelphia, New York and London: W. B. Saunders & Co. 1903. [Per volume: cloth, $3.00 net; half-morocco, $3.75 net.]

This work continues to be unique, in the way of condensations of annual medical literature. The excerpts are carefully made by men who are familiar with the publications of the year,

and have a practical knowledge of what is most needed as well as what is best. It is not easy to make selections from among such a mass of material as publishers put out every year, but from our examination of the volumes we are of the opinion that rare discretion has been exhibited in the preparation of this year book. The chaff has been winnowed most thoroughly, leaving only the pure, clean grain behind.

The volume on medicine is slightly larger than that upon surgery, but both are suited in size for the greatest convenience of research. Illustrations have been used both as plate inserts and text cuts, with the effect of giving tone and zest to the pages of reading matter. All in all, W. B. Saunders & Company deserve commendation jointly with the editor, for bringing out one of the best works of its kind published in this country, if not in the world.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF THE DISORDERS OF METABOLISM AND NUTRITION. By PROF. DR. CARL VON NOORDEN, Senior Physician to the City Hospital in Frankfurt, a. M. Authorised American edition, translated under the direction of Boardman Reed, M.D., Professor of the Diseases of the Gastrointestinal Tract, Hygiene, and Climatology, Department of Medicine, Temple College, Philadelphia. Part I. Obesity; the Indications for Reduction Cures. Duodecimo, pp. 59. New York: E. B. Treat & Co. 1903. [Price, 50 cents.]

This is a handsomely executed monograph on a subject of interest to overweight people, and gives physicians useful hints concerning reduction measures that may be adopted without detriment to the individual. It will well repay careful reading by all physicians interested in the subject of obesity from a therapeutic viewpoint.

BLAKISTON'S QUIZ COMPENDS. A Compend of Diseases of Children. Especially adapted for the use of Medical Students. By MARCUS P. HATFIELD, A.M., M.D., Emeritus Professor of Diseases of Children, Northwestern University Medical School; Physician to Wesley Hospital, Home for Crippled Children, Chicago Orphan Asylum, Chicago. Duodecimo, pp. 241. Third edition, thoroughly revised, with colored plate. Philadelphia: P. Blakiston's Son & Co. 1903. [Price, 80 cents.]

The object of this compend is to supply the undergraduate with an aid to his finals, and the post-graduate with similar aid in state examinations for license to practise. It is based upon a translation from the German of Kormans "Compendium der Kinderkrankheiten," made by the author and a fellow student while attending the University of Berlin several years ago.

It is an excellent résumé of pediatrics and meets the purpose in view with admirable effect and force. We challenge the propriety of such a sentence as this: "might substitute bismuth for magnesia, if much vomiting." (P. 198). Conciseness at the expense of grammar is undesirable. Some of the prescriptions are given in the metric system and others in apothecaries' weights and measures. Until the official establishment of the former it would be well to give formulæ in both.

SAUNDERS'S QUESTION COMPENDS. Essentials of Histology. By LOUIS LEROY, B.S., M.D, Professor of Histology and Pathology, Vanderbilt University, Medical and Dental Departments; Pathologist to the Nashville City Hospital, etc. Second edition, thoroughly revised and greatly enlarged. 16mo volume of 263 pages, with 92 illustrations. Philadelphia and London: W. B. Saunders & Co. 1902. [Cloth, $1.00 net.]

Saunders's question compends have doubtless filled a want in medical literature, as volume after volume of the series has passed into new editions. The volume on histology has been favorably received by the profession, inasmuch as the first edition was exhausted in a comparatively short time. The edition has been somewhat enlarged, especially the chapter on technic, which now is adequate to the needs of the student and general practitioner. Several new photomicrographs have been added and others replaced, making valuable additions to the little work.

Binding, paper and print are uniform with other volumes of the series and are commendable. W.C.K.

A TEXT-BOOK OF PRACTICAL MEDICINE. For the Use of Students and Practitioners. By WILLIAM GILMAN THOMPSON, M. D., Professor of Medicine in Cornell University Medical College, Physician to the Presbyterian Hospital, Bellevue Hospital, New York. New (second) edition, thoroughly revised. In one 8vo volume of 1,104 pages, with 62 illustrations. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $5.00; leather, $6.00; half morocco, $6.50 net.]

When Professor Thompson's first edition appeared, now nearly three years ago, it at once attracted attention as a text-book on internal medicine, assuming promptly a place in the front rank of such literature; this, too, in spite of the fact that the market seemed pretty nearly overcrowded. Now, after sufficient time has elapsed not only to exhaust the first edition, but to permit the book to gravitate to its appropriate level, we still find it a favorite among teachers, students and practitioners. Nor is it difficult to understand or appreciate this fact when we again give the treatise a careful examination.

It is proper to remark that the second edition exhibits abundant evidence of careful revision, which is shown not only by many minor changes throughout the text, but by the more material alterations pertaining to the greater subjects of dysentery, yellow fever, malaria, and the like. In view of the great progress recently made in the study of these and other infectious diseases, especially as relates to cause and prevention, the material herein contributed by Professor Thompson will prove of great interest, and should command patient, thoughtful attention.

In noticing the first edition we called attention to the skill with which the author handled diseases of the blood and vascular system. In this edition there is evidence of careful revision of this important subject, and we note also that much new material has been added to the department of diseases of the digestive system. These and other points indicate a progressiveness on the part of the author which is in keeping with the

spirit of the age, and which must influence the person who contemplates the purchase of a work on internal medicine. It is important in these busy days to obtain the very best information on a given subject, and to this book one will not appeal in vain for a fund of information in the field which it covers so well.

PROGRESSIVE MEDICINE. Fifth annual series. Volume I., March, 1903 A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 450 pages, illustrated. Philadelphia and New York: Lea Brothers & Co. [Per volume, $2.50, by express prepaid; per annum, in four cloth-bound volumes, $10.00.]

In this volume we find considered, first, surgery of the head, neck, and chest, by Charles H. Frazier; second, infectious diseases, including acute rheumatism, croupous pneumonia, and influenza, by James B. Herrick; third, diseases of children, by Floyd M. Crandall; fourth, pathology, by Ludvig Hektoen; fifth, laryngology and rhinology, by A. Logan Turner; and, sixth, otology, by Robert L. Randolph.

Like the preceding volumes this one is not simply a presentation of the several subjects in epitomé, but each is a carefully prepared dissertation, grouping and welding the best literature gleaned from the most trustworthy sources, and molded into a homogeneous compact form by experienced men, who add their own knowledge of each topic; making thereby a well digested encyclopedic article in each instance.

Like its predecessors, too, this book is admirably printed in large, clear type, upon tinted, well-finished paper, and is strongly bound, thus making an exceedingly agreeable volume to handle—not an insignificant item in the search for material on any subject within its covers.

CUSHNY'S PHARMACOLOGY AND THERAPEUTICS. A Textbook of Pharmacology and Therapeutics; or the Action of Drugs in Health and Disease. By ARTHUR R. CUSHNY, A. M., M. D., Professor of Materia Medica and Therapeutics, University of Michigan, Department of Medicine and Surgery, Ann Arbor, Mich. Third edition, revised and enlarged. In one 8vo volume of 750 pages, with 52 engravings. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $3.75 net; leather, $4.75 net.]

If one looks for the causes of current scepticism as to the value of drugs and of carelessness in their application, a great deal must be charged to ignorance of the precise action of the more important agents. Our current therapeutic literature is too dogmatic and our practice too empirical. But our teaching of therapeutics is improving, thanks to such books as the one before us. American medicine today owes a debt of gratitude to Schmiedeberg and his pupils in this country, who are working for the development of sound therapeutics upon a basis of exact pharmacology. The dedication of this book to Oswald Schmiedeberg is therefore appropriate. While Cushny's pharmacology presents a radical departure from the style of

most current therapeutic literature, in that laboratory experiment is made the basis of study and application of drugs, the appearance of a third edition within four years is evidence that just such a departure is welcomed.

The chief criticism that is likely to be offered is that the work is not sufficiently practical for the physician's use. The validity of this objection depends upon the viewpoint of the critic. In the reviewer's opinion the most important needs of physicians and students today in the field of therapeutics, is a more thorough knowledge of drugs and their definite effects and the ability to apply the remedy to the known pathological condition. To meet these needs this book is well adapted, and from the teacher's point of view is to be commended, both as to scope and detail. It is very readable, being unsurpassed in diction and clearness of statement by any book of its class in the English language. It gives what is actually known, and the best of what is believed, concerning the action and value of drugs. The discussions of doubtful points are truly scientific and happily exclude verbose rehearsals of historic experiments.

The illustrations are useful in the highest degree, as they usually represent actual experiments. Of special importance are the illustrations of the action of caffeine, digitalis, anesthetics and alcohol. The present edition gives much additional matter concerning alcohol and brings to us conclusions that are likely to stand as our estimate of that much discussed drug, for some time to come. To the advanced student in therapeutics is the book to be especially commened. Good binding and attractive form, with its superior character contributed by the author, make it a book that ranks with the very best in its line. E. H. L.

BOOKS RECEIVED.

Veasey's Ophthalmology. A Manual of Diseases of the Eye. For Students and General Practitioners. By Clarence A. Veasey, A. M., M. D., Demonstrator of Ophthalmology in Jefferson Medical College, Philadelphia. 12mo. 410 pages, with 194 engravings and 10 full-page colored plates. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $2.00 net.]

How to Keep Well. An Explanation of Modern Methods of Preventing Disease. By Floyd M. Crandall, M. D. 12mo, pp. 528. New York: Doubleday, Page & Company. 1903.

Transactions of the American Dermatological Association at its Twenty-sixth Annual meeting held at Boston, Mass., September 18-20, 1902. Frank Hugh Montgomery, M. D., Secretary. Chicago: P. F. Pettibone & Co. 1903.

The Practical Medicine Series of Year Books. Ten volumes. Issued under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Vol. V., Obstetrics. Edited by Reuben Peterson, M. D., Professor of Obstetrics and Gynecology, University of Michigan. 12mo, pp. 204. Chicago: The Year Book Publishers. 1903. [Price, $1.25; entire series, $7.50.]

Twenty-sixth Annnal Report of the Michigan State Board of Health. For the fiscal year ending June 30, 1901. Henry B Baker, M. D., Secretary. Lansing: Wynkoop, Hallenbeck, Crawford Co., State Printers. 1902.

The Medical and Surgical Uses of Electricity. Including the X-ray, Finsen Light, Vibratory Therapeutics, and High Frequency Currents. By A. D. Rockwell, A. M., M. D., Formerly Professor of Electro-Therapeutics in the New York Post-Graduate Medical School and Hospital. Octavo, pp. 672. With 250 illustrations. New edition. New York: E. B. Treat & Company. 1903. [Price, $5.00].

The Diagnosis of Diseases of Women. A Treatise for Students and Practitioners. By Palmer Findley, M. D., Instructor in Obstetrics and Gynecology in Rush Medical College, in affiliation with the University of Chicago. In one octavo volume of 494 pages, richly illustrated with 210 engravings and 45 full-page plates in colors and monochrome. Philadelphia and New York: Lea Brothers & Co. 1903. [Cloth, $4.50 net; leather, $5.50 net.]

International Clinics. A Quarterly of Illustrated Clinical Lectures and especially prepared original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedies, Pathology, Dermatology Ophthalmology, Otology, Rhinology, Larynology, Hygiene, and other topics of interest to Students and Practitioners, by leading members of the medical profession throughout the world. Edited by A. O. J. Kelly, A.M., M. D., Philadelphia, with the collaboration of Wm. Osler, M. D., Baltimore; John H. Musser, M. D., Philadelphia; Jas. Stewart, M. D., Montreal; John B. Murphy, M. D., Chicago; Thomas M. Rotch, M. D., Boston; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; Edmund Landolt, M. D., Paris, and Richard Kretz, M. D., Vienna, with regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Volume I. Thirteenth series. 1903. Philadelphia: J. B. Lippincott Company. 1903. [Cloth, $2.00.]

LITERARY NOTES.

THE Maltine Company has issued recently an album of photographs, called Quarantine Sketches. It contains between thirty and forty engravings showing the care of imigrants at the New York quarantine station on Ellis Island, in all its phases from the arrival on shipboard to the departure by rail for the far west. It is altogether one of the most instructive booklets that has been published by the Maltine Company; and this is according it great praise, for the company is noted for the dissemination of useful material.

THE Antikamnia Chemical Company has published a reference chart of Diseases of the Nervous System and Muscles, which is being distributed to the medical profession. It is prepared by Professor Edward Curtis Hill, M.D., of the Denver and Gross Medical College, Denver, Colorado, and is issued in folder form, making it convenient for the pocket. A well prepared index adds to its utility.

THE Samuel D. Gross prize of $1,200 will be awarded January 1, 1905, for the best original essay not exceeding 150 octavo pages in length, illustrative of some subject in surgical pathology or surgical practice, the candidates for the prize to be American citizens. For particulars address the committee, Drs. John B.

Roberts, William L. Rodman, and William J. Taylor, Philadelphia.

THE *International Medical Magazine* for June, 1903, will be devoted to a symposium on Hyperchlorhydia. Among the contributors the following names are announced: Professors C. A. Ewald and Rosenheim, of Berlin; George Hayem, of Paris; Carl von Noorden, of Frankfurt, and Dr. L. Kuttner, of Berlin. Also Drs. John C. Hemmeter and Boardman Reed, of Philadelphia; Allen A. Jones, of Buffalo; John A. Lichty, of Pittsburg; Fenton B. Turck, of Chicago; A. Robin, of Newark, Delaware, and Max Einhorn, of New York.

MESSRS. LEA BROTHERS & CO. announce that conforming to many requests they issue the work on the Eye, Nose, Throat and Ear, edited by Drs. Posey and Wright, in two volumes, as well as in a single volume.

Volume I., will be known as Posey on the Eye, and covers completely the subject of ophthalmology. It contains 690 pages, 358 engravings and 19 plates in colors, and monochrome. Price, cloth, $4.00 net.

Volume II. will be known as Wright on the Nose, Throat and Ear, and contains 570 pages, 292 engravings and 16 colored plates. Price, cloth, $3.50, net. The convenience of this plan, especially for textbook puropses, is obvious.

The work will continue also to be published in a single volume. Price, cloth, $7.00; leather, $8.00, net.

The Medical Critic, of New York, has issued an *index medicus* for 1902, which is a standard octavo book in paper binding of 268 pages. It begins with a list of the medical journals of the world, then follows a catalogue of the medical books of the year, next a classified list of magazine titles, which constitutes the bulk of the volume, and, finally, a roster of physicians who died during the year. It is a work of surprising accuracy, represents an enormous amount of labor, a considerable money outlay, and a spirit of progressiveness that is to be highly commended. It deserves the united moral and financial support of a grateful profession.

ITEM.

THE Mellier Drug Company, of St. Louis, has issued another beautiful art plaque, this one representing music. It is a panel-shaped picture, drawn in relief, the colors and white work giving it great harmony of effect. It conforms to the usual classic figures in form and pose, and is one of the most pleasing souvenirs that has been sent out to the profession.

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ORIGINAL COMMUNICATIONS.

Local Conditions of Geography and Population, as Bearing on the Water Supply and Sewerage of Buffalo.[1]

BY A. L. BENEDICT, M. D., Buffalo, N. Y.

CHOLERA Asiatica and typhoid are the only essentially water-borne diseases, and of these only the latter applies to our climate, though various parasites may adventitiously contaminate the water supply. Considering the welfare of Greater Buffalo, it should be remembered that practically all of the sewage of the city passes to the east of Grand Island, and that the contamination of the water becomes successively greater as we follow the course of the Niagara River, except that below the falls, the comparatively uncontaminated water of the Canadian channel is mixed with highly contaminated water of the American side.

In any general discussion of water sanitation, we must decide between thorough filtration or other treatment of sewage and filtration of the water supply. The former is the ideal method, especially for large cities, and the sewage sludge is of sufficient value to pay the cost of maintenance, though scarcely that of the original plant. Under present conditions, however, including the common law of drainage-rights, the water supply itself must be filtered. Without regard to the duty of the present municipality to Greater Buffalo, it may be interesting to note that about 1-100,000 of the water of the east channel of Niagara River consists of actual excrementitious matter from the human and animal population of Buffalo.

While typhoid bacilli have been recovered from water after 100 days, any parasite tends to die if long kept in a nonparasitic environment, and it is exceedingly doubtful if any considerable contamination of our water supply can be due to Detroit,

1. Illustrated lecture before the medical section of the Buffalo Academy of Medicine, March 10, 1903.

Cleveland, Erie, or even Dunkirk. Still, it must be admitted that Lake Erie is subject to pretty general contamination. The bulk of our typhoid, however, is due to local contamination. When the old intake in the lower harbor was used, there was considerable prevalence of typhoid, which fell off quite abruptly when this intake was permanently abandoned in 1895.

In many respects the local geography and population are favorable. Thus, along the Canadian shore, there is no brook or stream not usually closed by a sand bar, until we reach the Welland Canal, whose current is mainly from and only exceptionally into Lake Erie. The nearest stream of considerable size is the Grand River, which drains Dunnville, Brantford and other towns, having an aggregate population of probably not over 30,000, and its discharge is 35 miles distant. Aside from Buffalo Creek, which is really a small stream, originally nearly closed by a sand bar and whose apparent magnitude is due to dredging, we have no stream entering Lake Erie till we reach Smokes Creek, beyond Stony Point. This is ordinarily closed by a sand bar during dry weather, so that natural filtration occurs and there is little drainage into it, except after percolation through soil and, until the last year, the population tributary to it has been small. Between Buffalo and Stony Point there is a large swamp which prevents ordinary habitation and destines the land to use for railroads and canal dockage. Meanwhile it acts as a natural septic tank, like the swamps along the Canadian shore of the lake. With the exception of two or three small brooks, there is no further drainage into the lake on the New York shore, until we reach Eighteen-mile Creek, so-named because it is about 14 miles from Buffalo. This creek has no contamination except from rural drainage, and is subjected to spontaneous filtration at many points during the dry season. There is a good deal of summer population along both shores of the lake.

Confining our attention to Buffalo itself, we find the geographic conditions somewhat peculiar and, on the whole, rather favorable from the engineering standpoint. Beside the lake and river, the following water courses are to be considered: Buffalo Creek; the Erie Canal, the harbor above Buffalo Creek and that along the line of the Niagara River, converging with the Erie Canal opposite Squaw Island, and finally discharging into the Niagara River through a lock at the north end of Squaw Island. These watercourses might influence the water

supply of the city. Below the intake and, therefore, of importance only locally or with reference to the down-stream components of Greater Buffalo, is Scajaquada Creek, which contains a good deal of minor private drainage from the country immediately east of the city line and the northeast part of the city, all of which passes through Forest Lawn Cemetery. Although there are some large springs whose flow is through the cemetery into the creek, this flow is probably not directly through graves and, without such flow, there is very little possibility of the escape of pathogenic germs from corpses. On account of its rock bottom, there is little spontaneous filtration for Scajaquada Creek, but its expansion into the Park Lake constitutes a sedimentation tank, and there must be considerable spontaneous purification by saprophytes and macroscopic, aquatic plants. Entering the river at the foot of Ontario street is Cornelius Creek, a good sized stream twenty years ago, but now almost entirely drained into sewers, except during freshets.

Between Scajaquada Creek on the north, Buffalo Creek on the south, and Bailey avenue on the east, most of the city is sewered into Niagara River at Albany street below the water intake. North Buffalo discharges into the river at Ontario street. South and southeast Buffalo discharge into Buffalo Creek and its branches, and what is termed the "Island," between Buffalo Creek and the outer harbor, is partly sewered through Ganson street into Buffalo Creek. The outer harbor, above Buffalo Creek, is almost entirely inclosed by the breakwater, which, by the way, is the most extensive in the world, and there is no drainage of any kind into it, except through a considerable distance of sand, and except the drainage into a canal of the steel plant at Stony Point. With the exceptions just noted, the Buffalo Creek, Erie Canal and harbor below Buffalo Creek, receive only a slight local drainage until Scajaquada Creek is reached, where there is an overflow from the regular sewer to allow the discharge of rain water. Below this point, there is considerable local drainage into the canal, which is bad for Tonawanda and Lockport, but which does not affect Buffalo to a material extent. The Hamburg Canal is now a dead issue, but even at its worst it was probably not a source of much pathogenic contamination on account of the enormous development of saprophytes.

At the present time, allowing for imported cases of typhoid, our typhoid incidence is not very high and our water supply is much better than that of Philadelphia, for instance, and better

than that which we formerly drew from the harbor. I do not believe that we derive any considerable number of typhoid bacilli from distant cities. The United States Engineering Bureau reports that there are no appreciable currents in the lake, and the chances are very slight that a typhoid bacillus even from the Grand River or from Dunkirk should survive under the unfavorable surroundings of nonparasitic conditions, or should fail to be sedimented. The circumstances are far different so far as concerns the seven-hour trip from the Buffalo trunk sewer to Niagara Falls.

Under ordinary conditions, the breakwaters protect the emerald channel in which the intake is situated from contamination by Buffalo Creek; not that the breakwaters themselves are watertight, but that they serve to guide the currents. The real protection against contamination from shore currents on either side, is the natural force of the central current. The steel plant district and West Seneca are terribly contaminated with typhoid, and the sandy soil and ignorance of many of the residents are bound to lead to infection by dust and insects when dry weather comes. The very badness of the local condition is the main protection of Buffalo. There is practically no sewerage system at West Seneca and, instead of a direct discharge through Smokes Creek, we are liable to contamination of our water supply only from surface washing during floods and in the spring thaws.

On the other hand, during the spring freshets, the waters of Buffalo Creek may be carried out so as to contaminate the emerald channel and, according to the condition of the wind, the lake level is subject to frequent changes of five feet or more, so that shore water may be driven back and forth and may reach the intake from either shore. Then, too, during the summer, the enormous number of vessels leaving Buffalo Creek may carry bacteria into the emerald channel. Only four ports in the world have more shipping than Buffalo. Finally, it must be considered that in spite of what has been said, Lake Erie is not entirely free from typhoid contamination and is likely to become more contaminated as the population increases along its shores.

It has been suggested that the danger of contamination of our water supply may be immediately reduced, so far as Buffalo and Smokes Creek and American shore pollution are concerned, by opening the lock in the harbor at Squaw Island, so as to

increase the harbor current. This suggestion is worth acting upon. So far as sewage disposal is concerned, it would be possible at considerable and yet not prohibitive expense, to collect all of the sewage of the city on Squaw Island, which would probably be large enough for a plant for separating sludge, and this could be sold for use on slowly growing crops, but it should never be used on market gardens. A more ideal plan would be to convey all of the sewage of Greater Buffalo to a line somewhere between the present north city line and Tonawanda, and to establish a sewage farm somewhere about Rosedale. At least 500 acres would be necessary. Or, to avoid the expense of tunneling Buffalo Creek, the sewage of south and southeastern Buffalo, including West Seneca and the Steel Plant, might be led to a separate farm. The fall of Buffalo Creek within the city limits is very little, barely ten feet, so that, in carrying sewage away from the lake, less pumping would be necessary than in delivering at a sewage farm to the north of the present city limits.

Without regard to sewage disposal, it will be necessary to filter the water supply, in order to secure protection from typhoid. It has been proposed to carry the water inlet farther up into the lake. This would apparently do away with the danger of contamination from Buffalo Creek, including ordinary sewage and rural drainage. The market gardens east of the city are freely fertilised and, up to a few years ago, to a considerable degree with nightsoil. At present there is not much human excrement used. But there is now practically no danger from Buffalo Creek, except for a few days in a year, from increase of current by freshets and from the rise and fall of the lake level, which is equivalent to a tide of ten feet or more between high and low water, but which is due to banking of the water by winds. This rise and fall endangers the purity of our water supply from water normally in contact with one shore or the other, and it is practically impossible to carry the inlet far enough into the lake to do away with the tidal danger, and particularly to obviate the danger from West Seneca, where typhoid is liable to be endemic for several years. Even if we secured a location free from present contamination, there is no knowing when some Canadian enterprise may change the local conditions as suddenly as has been the case at Stony Point. We must remember that the unusually favorable commercial circumstances at the eastern end of Lake Erie, promise a large

population in the comparatively near future and that the slow development of the past has been due solely to an abnormal lack of local enterprise.

I believe thoroughly that we cannot hope, even by the most tremendous engineering feat, to get a source of water supply essentially better, except temporarily, than the present. The experience of European cities, dealing with a water supply much more highly contaminated than that of Lake Erie can become, without any special care as to sewage, so far as we can now foresee, is that sand filtration may be expected to reduce typhoid mortality to about 2 per 100,000 population. The actual results for several European cities vary from this up to 9:100,000. Artificial filters of various kinds have been used by several small American cities, but they do not produce as good results and, in four or five cities, the incidence of typhoid has actually increased from 20 to 70 per cent.

Buffalo is at present pumping rather more than 100 gallons of water per capita per diem. It would hardly be worth while to filter this entire amount, for the contamination is negligible for sprinkling and fire purposes and for purely commercial uses. A domestic supply of 30 gallons per capita would be ample, and Dr. Greene, the commissioner of health, informs me that an acre of sand filter can yield from 1,000,000 to 1,500,000 gallons daily. Hence, 12 acres would suffice to purify our present need of domestic water supply. So large a tract is not available near the present reservoir, and the elevation of the reservoir is only about 80 feet, while the maximum elevation of the north-eastern part of the city is from 100 to 120 feet, so that we have to rely upon Holly pressure for a considerable part of the city. The necessary land could be found near the present pumping station, either on Squaw Island or near the Front. The proposal to place a general reservoir in the Hamburg Hills, to supply the entire American Frontier, involves too great expense to be considered at present. Even by going out into the lake, at this point, it would still be necessary to establish a sand filter, but the latter could be easily and quite cheaply secured.

In conclusion, I wish to express my thanks to Dr. Greene and other members of the local health department, to Mr. Fell, of the engineering department, and to Mr. Green and Mr. Odell and, through them to the firm of Matthews & Northrup, for the loan of the interesting and complete maps which have been used as illustrations.

NOTE.—In summing up, Dr. Benedict expressed the belief that Smokes Creek could easily be turned inside the breakwater, but that the principal immediate danger is from accidental surface drainage, there being practically no sewerage system at West Seneca. While not ascribing any large proportion of present contamination to distant sources, he agreed with Dr. Hopkins and Dr. Greene that there was an increasing general contamination of the water of Lake Erie. The breakwaters did not directly protect against shore contamination, but served to guide the currents. The real protection was by the force of the currents themselves. He did not believe that the speed of floating objects could be relied upon to indicate the progress of submerged material, such as sewage particles, the latter being protected from wind. The tendency was for all such particles to be driven toward the shore. The sulphurous taste of water during the winter indicated flow from springs in the tunnel itself, and there might be contamination from the overlying harbor.

156 W. CHIPPEWA STREET.

Why Minor Gynecological Operations Fail to Give Anticipated Results.[1]

BY SIGMUND GOLDBERG, M. D., Buffalo, N. Y.,
Gynecologist, German Hospital; Consulting Gynecologist, German Hospital Dispensary.

AT THE outset I would define a minor gynecological operation as one which does not involve the opening of the peritoneal cavity.

We may accept as an established axiom that the majority of genital ailments are due either to trauma during accouchement, or specific infection, and that the ultimate results of such accident or infection, in the course of time, will produce certain pathological conditions irreparable other than by operative procedure.

The ultimate results may be stated to be diseases of the uterine adnexa, which are not to be relieved by treatment, surgical or medical, on the original lesion. For example: given an injury of the cervix during labor, the same not being repaired at time of injury, or within six months or one year following, it is but natural that we should expect a development of an endometritis due to eversion of the contiguous mucous membrane, and it is

1. Read before the section of Obstetrics and Gynecology of the Buffalo Academy of Medicine, March 24, 1903.

but natural to infer, further, from the history of numberless similar cases, that such contiguous disease will not so remain, for there is no structural barrier to so limit the process, the mucous membrane of the cervix, uterus and fallopian tubes being of very similar micro- and macroscopical construction.

Nevertheless, it seems that nature, ever judicious in her ends, has formed some protective barriers, which are effective under ordinary conditions of health. For instance, Wyder says, that the epithelium on the crests of the endometrial folds is usually described as having cilia, which, Wyder insists, have a motion from the os internum toward the fundus.

Hofmeier (*Centralblatt für Gynækologie*) criticises this view. Not only were his own studies conducted upon fresh uteri, removed from mammals in which the conditions ought to be the same as in the human female, but he also examined organs removed at the operating table and at once immersed in a warm saline solution. In several of these latter he demonstrated conclusively, by removing strips of endometrium and placing them under the microscope, that minute particles of charcoal were invariably carried by the ciliary movement from the fundus toward the os.

This observation of Hofmeier seems at least to be in harmony with an intelligent design of nature, by which obstacles are interposed to the easy invasion of the upper reaches of the genital tract. But under the stress of injury or infection, these frail barriers are no longer effective, or, at least, in a great measure, have lost their potency, and this once lost, progressive endometrial infection, traveling on and infecting the adnexa, is the next step in the progress of the majority of the sexual ills of womankind. Next we find, due to the constant irritation and consequent increased weight of the uterus, a complication of adnexial disease, a retroversion or flexion, or both; and this condition, in my humble opinion, I consider the most common complication of adnexial disease.

Therefore, this condition generally receives the most attention, because of its alleged influence on the general health; but to my mind these various retropositions of the uterus are, *per se*, insufficient to intelligently account for all the symptoms usually ascribed to them. True, they may give some feeling of discomfort, some difficulty of locomotion, and in many cases not even this. The more active symptoms, generally ascribed to retro-

position, such as pain, metrorrhagia, sacralgia, and more or less permanent invalidism, are due to the adnexial involvements.

It seems to me the height of folly to repair the cervix and fasten the uterus by the Alexandrian method or any of its modifications. For, after one year, we may feel morally certain that the seeds of disease are sown in the tubes and ovaries, although we may not always be able to positively demonstrate the exact condition by the usual method of examination.

J. Sprecht says that the early stage of pyosalpinx or salpingitis is hard to recognise because it follows immediately upon, or is associated in conjunction with, endometritis, the endometritis masking the symptoms of tubal disease. It is on account of our diagnostic fallibility that so many minor gynecological operations, such as the Alexander, curetage and trachelorrhaphy, result with only a modicum of benefit, and the cause, therefore, being the failure to recognise the early stages of disease in the adnexa. It was this very fact that induced A. Goldspohn, of Chicago, in his classic article published in the *Medical Record* of October 8, 1898, to advocate opening the internal inguinal rings for the purpose of inspecting the uterine adnexa during the performance of an Alexander operation.

The idea of opening the rings and inspecting the ovaries in every case, to ascertain their condition, was first impressed on Prof. Goldspohn, on September 18, 1893, during the performance of an Alexander operation, and not being able to find one of the round ligaments, he opened the internal inguinal ring and traced the ligament from the uterus within, outward. Incidentally the tubes and ovaries were discovered to be badly diseased and were taken out. A good cure, anatomically and subjectively, was obtained and the serious mental derangement, which had prevented a careful examination and exact diagnosis, disappeared entirely. Since then he has made a practice of introducing a finger and examining the adnexa very generally, in connection with the operation on the ligaments, which can really never be duly drawn out and shortened sufficiently without opening the peritoneal cavity.

I call your attention to what he says, further, regarding the practical importance of opening occluded tubes, destroying cystic follicles in ovaries or removing diseased parts from them, or of securing them in an approximately normal position. Goldspohn was not convinced until more recent years, when clinical experience, chiefly with patients after the Alexander operation,

forced him to accept it as a general principle, that in cases of displacement of the uterus, any operation for this alone is a fulfilment of scarcely half our duty, and that nearly an equal obligation remains for treatment at the same time of the adnexa, in a large percentage of cases.

I object to the Goldspohn method, because it punctures a hole in the abdomen, the manipulative power of the finger is cramped, and we have a hole through which to work, instead of an incision, and we do not have the benefit of sight into the abdomen. But I do approve of the general principles underlying Goldspohn's modification of the Alexander operation, accidentally discovered, and at the same time finding ovaries and tubes of whose diseased condition he was unaware and of which we can never be absolutely certain.

I further believe it to be a great error, as stated in the majority of textbooks, that the Alexander operation is applicable in freely movable retroposition. I have, in quite a number of cases, during my service at the German Hospital and in my private practice, demonstrated to several gentlemen present, the free movability of the uterus and the apparent healthfulness of the adnexa as far as physical examination could demonstrate. Yet, believing, in every instance from the long standing history of injury or infection, that the uterine adnexa must of necessity be involved, I have freely opened the abdomen and fully demonstrated their diseased condition.

I do not wish to be understood as advocating that the Alexander operation has no place in our efforts for the alleviation of suffering woman, but I do unreservedly claim that it should be limited entirely to acute retroversion of recent standing, such as may be caused by a fall or such as would not be likely to produce an infective condition of the genital organs; and even here, occasionally, we may be disappointed in results if case has been of long standing.

While I am well aware how tedious the detailing of cases is to practical men, I cannot refrain from reporting one in support of this:

Miss W., pupil nurse at the German Hospital, aged 33; first consulted me March 20, 1902, for sacralgia, metrorrhagia and a general feeling of invalidism. Receiving no benefit from various drugs prescribed by me, she submitted to an examination by Dr. Max Breuer, then on service at the German Hospital, and myself. The examination showed hymen intact and a retro-

verted uterus of third degree, and what appeared to be a peculiar ridge-like cicatrix in the vagina. No other abnormality or disease of adnexa could be discovered at this time. Alexander operation was proposed by us and accepted by Miss W. While under anesthesia, Dr. M. Hartwig, who was present and assisted, made a careful examination and agreed with me that he could find nothing which would invalidate the ordinary rules for performing an Alexander operation. It was found that the supposed cicatrix was a congenital atresia between the cervix and the anterior wall of vagina, pulling the cervix forward and throwing the fundus backward. I first performed the plastic operation for the separation of the cervix from the vagina, followed by an Alexander. I operated on one side, while Dr. Hartwig operated on the other. During her three weeks confinement to bed, Miss W. was very much relieved. After this she returned to her home in the country. Later a letter from her, saying that all symptoms had returned and she was no better than before the operation. I advised her by letter to return to Buffalo, which she did. On examination I found the uterus mechanically in excellent position, could feel the ovaries apparently not enlarged, but very sensitive to touch. I informed her that an operation on her ovaries would be necessary for her future relief. She gratefully declined this. I have since learned that some form of intraäbdominal operation was performed at the Rochester City Hospital, and that now she is in perfect health.

I have never yet had cause to regret opening the abdominal cavity when there was the least doubt in my mind as to the exact condition. On the other hand, a number of times I have had to regret when I was not sufficiently heroic, and allowed myself to believe that some tinkering gynecological procedure would be sufficient. In further substantiation of what I assert, I will quote from an article by Aug. Goelet, published in the *Medical Record*, August 29, 1896. He says, in summing up: "Alexander's operation is not necessary in movable retroversions unless they are complicated by prolapsed, enlarged and sensitive ovaries, which do not require removal."

Personally, I cannot conceive of a prolapsed, enlarged and sensitive ovary, which does not require some form of operative procedure for its relief, its prolapsed, enlarged and sensitive condition being generally due to a condition of cystic degeneration, a condition not amenable to any form of treatment except surgical, radical or conservative.

Goelet further claims that the operation of dilatation with curetage and the subsequent use of a glass drainage splint, is indicated in a large majority of cases of movable retrodeviation

and is more rational, since it restores the normal position of the organ without submitting the patient to any risk and does not entail prolonged confinement to bed.

If Alexander's operation, *per se*, ever did any good, even under the rules laid down by its originator and his followers, why this threshing around among our ablest men in their attempts to improve or change it? Why do some of the leading gynecologists of the world, with their vast opportunities for observation, fail to record or announce any positive cure, unless a mechanical reposition for the uterus can be considered a cure, without taking into consideration the subsequent well being of the patient?

I will call your attention to a statement of Nicholas Senn, in his report of observations in Berlin, at the gynecological clinic of Prof. Olshausen. He says that Prof. Olshausen only commenced to perform this operation three years ago, and according to established rule limits operations to cases of retroversion of a movable uterus, which produces symptoms of sufficient severity to warrant operative interference. To this, again, I object, as the movability of uterus should not be taken as the sole indication for the performance of an Alexander operation.

But the most important point which I wish to bring out in connection with the report of Dr. Senn, is that of the wealth of material in this clinic, as shown by the fact that of about 700 patients suffering from retroversion of the uterus, applying annually for relief, only from 25 to 40 cases are selected for an Alexander operation. But Prof. Olshausen is as yet a new hand in the performance of this operation, and as his experience therewith increases with time, and he has had more opportunity for observation of its ultimate results, he will still further limit the number of his future operations.

Now compare with their wealth of material with regard to retroposition, the small number of Alexander operations performed in Europe, to the gigantic numerical statistics which can be exploited by American gynecologists. It seems to be the especial glory of every gynecologist, embryo or otherwise, to dilate on the number of Alexanders he has already performed, and, if opportunity is favorable, to demonstrate, as a result thereof, the more than normal position of the uterus. But, as their experiences keep pace with their advancement in years and for opportunities of observance of ultimate results, and their patients return to their offices and report themselves very

little benefited, if any, by the operation, it will hardly soothe their mental dissatisfaction to tell them that the uterus is exactly where it ought to be or a little better placed.

I assert, then, that the ordinary trachelorrhaphy, curetage and Alexander operation, or the method of Goelet, by scraping and packing and his drainage splint, are insufficient to restore such a patient to complete health, and the failure to restore the patient is due to the fact that the time for such work is long past, unless the same be done within one year from time of infliction of original injury.

In conclusion, then, I would formulate for your kind consideration the following propositions:

1. That all so-called minor gynecological operations, to be of any permanent benefit, must be performed within at least one year from time of the infliction of the original lesion.

2. That after the passage of about a year, either Alexander's operation, trachelorrhaphy or curetage, or all combined, will be insufficient to restore patient to perfect health.

3. The reason for such failure in the great majority of such cases, after one year, is because the adnexa are sure to be involved.

4. The best course will be to do some operative procedure intraäbdominally, and not by the internal inguinal ring puncture of Goldspohn, but by free incision, so that the exact condition can be ascertained and properly treated, and this I hold to be proper rather than to depend upon the uncertainty of physical palpation.

508 Eagle Street.

Clinical Memoranda on Cough.

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IN 1898 Dreser[1], while looking for a morphine derivative that would prove superior to codeine as regards its influence upon the respiration, found that the diacetic acid ester of morphine, heroin [$C_{17}H_{17}:(O.OC.CH_3)_2:NO$], was a substance which could be described as an ideal respiratory sedative.

Since the publication of Dreser's article, his observations have been confirmed and amplified by trustworthy observers in all parts of the world, and the introduction of heroin gave medicine a drug that was destined to remain as a remedy of acknowledged worth, of undoubted trustworthiness, and of marked advantages over its predecessors, the sedative narcotics.

The physiological action of heroin has now been thoroughly studied, both by experiments upon animals and by clinical observations. Dreser, whose comparative studies of the action of the various morphine derivatives as respiratory sedatives have become classical, was the first to establish the fact that heroin had a more profound sedative action on the respiration than morphine, and that it was ten times more powerful in this respect, dose for dose, than codeine, while the fatal dose of heroin was ten times larger than that of the last-named alkaloid. These quantitative relations of heroin to the other morphine derivatives placed it in a class of its own. The principal effect of heroin is to reduce the frequency of the respiration, but this takes place, unlike the case of other respiratory sedatives, without any loss of oxygenation to the lung alveoli, for the less frequent respirations after a dose of heroin are deeper and fuller, the force of the inhalations being increased. Therefore, while the intervals between the inspirations are lengthened, and the duration of the inspiration is increased, the force of the act of breathing is so enhanced that there is a more perfect aeration of the pulmonary alveoli than before taking the drug. This property of heroin of increasing the aeration of the lungs may at once be recognised as of the utmost importance in the treatment of catarrhal conditions of the respiratory tract, for it is essential in these diseases that the secretions be not allowed to stagnate in the lungs and bronchi, but that a free access of air should take place to the lung surface so that the healing of inflammatory lesions may be promoted.

The general physiological effects of heroin have also been studied, and it was found that the administration of moderate doses of this drug produces a reduction in the consumption of oxygen by the body, and correspondingly diminishes the amount of carbon dioxide eliminated. This property is valuable in two sets of conditions—namely, first, in states accompanied by dyspnea, or air hunger; and, second, in febrile conditions of a hectic type, where heroin diminishing oxidation, lessens heat production and lowers the temperature. The reduction of the respiratory

activity which is produced by heroin, is therefore compensated by a fuller aeration of the lungs, and by a lessened demand for oxygen. Besides, it must be noted, that heroin does not in any appreciable degree diminish the sensitiveness of the respiratory center to the chemical balance of oxygen and carbon dioxide in the blood, and does not, like codeine, increase the reflex irritability of the respiratory center in the presence of an obstruction in the air passages.

The action of heroin on the circulation is perfectly satisfactory, from the viewpoint of its desirability as a respiratory sedative. Only excessive doses affect the pulse rate and the blood pressure, and after fatal doses the heart still continues to beat after respiration has for some time ceased to be appreciable. Death, therefore, takes place by respiratory paralysis in these cases. Moderate, and even large, doses of heroin do not produce any disturbance on the part of the circulation.

The unpleasant symptoms following the use of morphine, codeine, and other narcotics, are totally lacking in the use of heroin. No headache, nausea, vomiting and depression, occurs after its use. The drug is practically devoid of hypnotic effect, and its prolonged use does not create a habit, nor does it produce constipation. In all these respects heroin is superior to morphine and codeine. Some authors have, however, reported cases in which moderate doses of heroin have been followed by a feeling of lassitude[5] and of dizziness, but we have never seen such cases among a large number in which we have used heroin. In our experience with heroin, which began in the winter of 1898-99, we have found a satisfactory respiratory sedative, and an efficient remedy in the treatment of coughs, both in children and adults.

The best mode of administering heroin so as to bring its good qualities into full play has occupied us for some time, and we have tried successively the various methods of administration recommended by writers on this subject, such as Floret[1], Manges[2], Freudenthal[5], North[7], Einhorn[11], Wetherby[17], Medea[19], Hyams[32], Martinson[38], and others.

We found, however, that the most satisfactory way of administering heroin was in a glycerine solution, combined with expectorants and stomachics. Glycerine seems to serve as the best medium for blending the properties of heroin with those of the other drugs used in the combination. The expectorants which we added, almost from the first, to heroin, seemed to

enhance the rapidity of its action, causing secretion to be coughed out in a painless, easy manner, thus ridding the respiratory mucosa of irritating foreign matter and adding to the respiratory capacity of the lungs. The idea of adding stomachics and bitters was to counteract any effects that heroin, or the other drugs in the formula, may have upon sensitive stomachs when the remedy is administered for a length of time.

A number of combinations were tried in this way, until two years ago, when we began to use glycoheroin (Smith), a preparation which is composed of a glycerine solution of heroin with the addition of expectorants and stomachics,—just on the lines on which our former prescriptions were based. The success which we had had in treating cough with heroin in such combinations gave us hope that glycoheroin would give good results, and we decided to test it thoroughly, as regards its value as a mode of administering heroin, giving it to the exclusion of other remedies, wherever indicated in a series of cases. The results of our experience with glycoheroin are presented below.

Glycoheroin is described as a dark amber-colored liquid, which is perfectly clear, of a density approaching that of pure glycerine, of an agreeable aromatic odor, and a sweet taste with a slight suggestion of bitterness. Its formula is as follows:

℞	Heroin hydrochloride	gr. $\frac{1}{16}$	0.00375 gm.
	Ammonium hypophosphite	gr. iii.	0.18 gm.
	White pine bark	gr. $3\frac{1}{2}$	0.21 gm.
	Balsam of tolu.....	gr. $\frac{1}{4}$	0.015 gm.
	Hyoscyamus.....	gr. i	0.06 gm.
	Glycerine, enough to make	ʒj	4.0 gm.

Each fluid drachm of glycoheroin therefore contains exactly 1-16th of a grain of heroin hydrochlorate. The dose chosen represents an average amount given to adults, every two, three or four hours. In children we have made a practice of diluting glycoheroin with various vehicles, usually either with glycerine or with simple syrup; or, when occasion required, we have taken the opportunity offered by the dilution to add other drugs, as some of the prescriptions given below will indicate. In children the dose ranges from one to thirty drops. The following table, from Lowenthal[34], may be found useful in this connection:

Aged	1 month.....	grain	1-300	maximum	dose.
"	2 months.....	"	1-275	"	"
"	3 "	"	1-250	"	"
"	4 "	"	1-240	"	"
"	6 "	"	1-220	"	"

Aged	8 months	grain	1-200	maximum	dose.
"	10 "	"	1-150	"	"
"	12 "	"	1-125	"	"
"	2 years	"	1-50	"	"
"	3 "	"	1-36	"	"
"	4 "	"	1-30	"	"
"	5 "	"	1-25	"	"
"	6 "	"	1-20	"	"
"	7 "	"	1-18	"	"

Ten drops of glycoheroin represent 1-96th of a grain of heroin hydrochloride, so it is easy to calculate the dosage for children and to dilute the dose to a teaspoonful. A few words must be said as regards ammonium hypophosphite, which figures in the above formula. It is a salt that is comparatively rarely used, but one that is superior as an expectorant to the other ammonium salts in the mildness of its action and the absence of irritation, either to the larynx, the bronchi or the stomach, following its use. The virtues of ammonium hypophosphite have not been generally recognised to the extent which they deserve.

The other constituents of glycoheroin are remedies of such thoroughly accepted standing, that they need no comment, for the astringent properties of white pine and the soothing effect of balsam of tolu are known to everybody. Hyoscyamus is added as a stomachic. Glycerine is undoubtedly the best vehicle that can be selected for these drugs; it enables the combination to remain perfectly unchanged for a long time, and lacks the fermentative tendencies of sugar and syrup.

We have observed a series of 20 cases, which are the last 20 treated with heroin that have come under our observation, in 13 of which we wish to record in detail our results just as they were noted, without attempting to exaggerate on the one hand, nor to underestimate on the other, the effects produced by glycoheroin on the leading symptom—cough.

The histories have been condensed as far as possible, but in each enough has been given to show the nature of the case, the sequence of events, and the quality of the results obtained.

REPORT OF CASES.

Case I.—*Tuberculosis.*—E. O., aged 40 years; was suffering from cough for several years. He had severe pains in the back and side; a troublesome cough, with mucopurulent expectoration, and was hoarse at times. The physical examination showed coarse as well as fine râles and friction sounds. Tubercle

bacilli were found in the sputum. The diagnosis was pulmonary tuberculosis.

On October 4th, glycoheroin was prescribed in drachm doses, every two hours. On the 8th, the patient felt much better; his cough was loose and less frequent, and his pains were not so severe. The medication was continued every three hours. On October 11th, the improvement continued. He coughed very little, only in the morning, was not so hoarse and had hardly any pains. Glycoheroin was continued three times daily. On the 13th he went to work, in spite of my warning to the contrary, and had a severe hemoptysis on the following day. Rest was ordered, and glycoheroin was continued every four hours, no other drugs being given. On the 22d he felt well, still had cough in the morning, with expectoration, but there was hardly any cough during the day. He slept well and had a good appetite.

November 8th. He has been feeling well and has not been troubled with cough. There were no bacilli found in the sputum. Throughout the time of observation his temperature had varied from 99° to 102° F. in the afternoon. On November 8th the temperature was normal, and had been for a week.

Case II.—*Tuberculosis.*—S. A., aged 38 years; has been ill since March, 1901. He had been coughing and had had a mucopurulent expectoration and severe pains in the back and sides since that time. His appetite had been poor, his sleep disturbed and restless owing to the cough, and he has had pains in the stomach, especially after meals, probably due to the enormous amount of cod liver oil and creosote which he had been taking. He had rapidly lost flesh and strength and had been operated upon by one of us (L.F.H.) for a tuberculous fistula in ano with a resulting permanent healing. Numerous tubercle bacilli were found in his sputum. The diagnosis was general tuberculosis.

On October 6th, having been disappointed in the effects of creosote, guaiacol, and the like, upon his cough, and knowing his to be a hopeless case, we decided to give him glycoheroin in drachm doses every two hours. On October 14th, one week later, the patient felt better, his breathing was easier, his cough looser and not so frequent. His appetite had improved and there were no digestive disturbances. The medication was continued every three hours. On October 19th, the patient ceased to take glycoheroin, thinking himself sufficiently improved to go without medicine. On the 21st he presented himself again, feeling considerably worse, the cough again having become more severe and the pains having increased. The same medication was ordered, every three hours. On the 25th the patient once more felt well, the cough troubled him only in the morning and the expectoration was mucopurulent, but he had not slept so well.

On November 6th he felt better and could sleep fairly well, but he still coughed in the morning. He admitted, however, that he felt quite "easy."

NOTE—This is a case in which we could only hope to moderate the symptoms, which the glycoheroin did. The disease is slowly but surely progressing.

Case III.—*Subacute Bronchitis (Tuberculosis?).*—C. S., aged 30 years; had been coughing for about two weeks; felt weak and did not sleep well. He had expectorated some clear, red blood, but there were no signs of tuberculosis found in his chest and no bacilli in his sputum, which was scant and mucoid in character.

On October 6th, glycoheroin was given in drachm doses every three hours. In four days his cough had stopped entirely; he felt easier and slept well. His breathing had also become easier. He was sent to the mountains for two weeks and returned in good health, having gained seven pounds.

The diagnosis in this case was probably a simple bronchitis of the subacute type.

Case IV.—*Chronic Bronchitis and Asthma.*—Mrs. R. V., aged 42 years; has had cough with expectoration, accompanied by dyspnea, every winter for the past eight or nine years. No tubercle bacilli were found in her sputum.

On October 20th, a drachm of glycoheroin was administered every three hours. On the 25th the patient was greatly improved. Her cough had diminished considerably. It was more marked during the day and scarcely present during the night. Her dyspnea was greatly relieved. The medication was continued, glycoheroin being given every four hours. On November 3d, the improvement had steadily continued, and her cough was much easier and less frequent.

NOTE—In this case the physiological action of heroin was well illustrated, the patient's breathing showing a diminution in the rate and an increase in the depth of the respirations.

Case V.—*Chronic Bronchitis and Asthma.*—P.H., 55 years old; had been suffering with acute attacks of asthma and bronchitis every winter for the past few years, and has been coughing more or less constantly during this time.

On October 19th, glycoheroin was given in drachm doses every three hours. On the 23d his cough had become looser, he slept sounder and more quietly but he still coughed considerably. On the 26th no improvement was noted; in fact his cough had become worse and his breathing harder. Glycoheroin was discontinued. The result was unsatisfactory in this case.

Case VI.—*Laryngitis and Pharyngitis.*—Miss B. P., aged 19 years; complained of a short, hacking cough, and was slightly hoarse. Her pharynx and larynx were congested and

she had adenoid vegetations. Her tonsils had been removed some time ago. There were no signs of disease in her lungs. A drachm of glycoheroin was given every two hours. The patient complained of feeling drowsy, but coughed continually. The result in this case was unsatisfactory, probably because the patient did not take the medicine regularly.

Case VII.—*Bronchitis and Laryngitis.*—L. L., a boy 3 years old; had a croupy cough, which was worse at night. Glycoheroin was given in five-drop doses, every three hours in the daytime and every two hours towards evening and at night. The hoarseness disappeared entirely in three days, while the cough lasted a few days longer.

Case VIII.—*Acute Bronchitis.*—Miss F. H., 15 years old; was suffering from a dry and irritating cough for three days. A half drachm of glycoheroin every three hours was given and the cough disappeared entirely in four days.

Case IX.—*Tuberculosis.*—P. E., a girl 7 years old; had been ill for three months with a very bad cough and expectoration, emaciation and anorexia. Coarse râles were heard over both lungs. She also had a diarrhea which would not respond to treatment with the ordinary remedies. After trying many drugs for her cough, glycoheroin was given in doses of twenty drops every two hours. She also took the compound syrup of hypophosphites as a general tonic and small doses of salol and castor oil for the enteritis. Under this treatment she began to improve. Her bowels became more regular and her cough grew less severe. We did not see her for one month, and then the cough became worse. Glycoheroin was continued, twenty drops every three hours, and almost immediately some improvement showed itself. In ten days' treatment the râles had diminished and the cough was considerably better. At the time of writing the patient still had some cough, but her appetite is improving and her bowels are in good condition.

Case X.—*Asthma.*—I. W., a boy aged 8 years; has had dyspnea for several weeks, with cough and expectoration. The following mixture was given:

℞	Tincture of lobelia	℥j	4.0
	Glycoheroin	℥v	20.0
	Syrup of hydriodic acid	℥j	30.0
	Water enough to make	℥ij	60.0

M. Sig.—A teaspoonful every four hours.

In four days the child was very much improved. His breathing was much less labored, and he coughed very little. The medicine was continued for a week, after which the patient was no longer under observation.

Case XI.—*Bronchitis and Laryngitis.*—N. F., a girl of 6 years; had a croupy cough with hoarseness, worse at night, for five days. The following mixture was given:

℞	Syrup of ipecac	5.0
	Syrup of squills	5.0
	Glycoheroin	8.0
	Syrup of wild cherry, to make	60.0

M. Sig.—A teaspoonful every three hours.

In three days the patient was considerably better, and in one week entirely well.

Case XII.—*Pertussis.*—C. V., 3½ years old; coughed for about two weeks with very violent spasms, without vomiting. Glycoheroin was given, ten drops every two hours, and later every three hours. Within three days the spasms became milder, and in two weeks more the cough had ceased entirely.

Case XIII.—*Pertussis.*—J. V., 2 years old; coughed for about two weeks, with typical paroxysms of pertussis, diarrhea, bloody stools, and temperature of 103° F. Calomel was given, followed by a bismuth mixture. Glycoheroin was given throughout the subsequent treatment in 5-drop doses. Diarrhea got well without being adversely influenced by the glycoheroin. In two weeks the cough had almost entirely disappeared.

In these cases various drugs and methods of treatment had been used without success. An older brother of these two patients had had an attack of pertussis, from which he was just recovering when we were called in to treat the other two.

Of 20 cases of cough of various kinds, 13 of which are reported in detail, 12 were cured in a short time, 7 greatly improved, and two resisted treatment and did not improve. In one of the latter, (Case VI., laryngitis and pharyngitis,) the unsuccessful result was due to irregularity in taking the medicine and to the short time of observation. In the other failure (Case V.) we had to deal with an old case of chronic bronchitis and asthma that had failed to yield to all other forms of treatment.

We must call attention particularly to the very favorable results obtained in our cases of tuberculosis and of whooping cough. In the tuberculous patients the cough had been most distressing, and was rapidly alleviated by the administration of small doses of glycoheroin. In the cases of whooping cough, the results far exceeded our expectations, which are never very high when we deal with such an intractable disease as pertussis. We found that the cough in all cases rapidly lost its spasmodic

character; that the vomiting and the other distressing accompaniments of the cough ceased, and that the number and intensity of the paroxysms progressively diminished.

In two cases of asthma (Cases IV. and X.), very satisfactory results were obtained and the drug acted in an irreproachable manner in all the cases of bronchitis, except in Case VI., which has already been referred to.

CONCLUSIONS.

1. In glycoheroin we have found a perfectly satisfactory mode of administering heroin, and the results of our experience with this preparation have been such as to dictate a marked preference for it above other combinations containing the diacetic acid ester of morphine.

2. It is especially valuable in whooping cough. Small doses of it are easily borne by children, and even by infants, and the results obtained are prompt and permanent.

3. We also have found glycoheroin useful in the treatment of pulmonary tuberculosis, in reducing the cough, night-sweats, fever, pain and dyspnea; in adding to the general well being of the patient without disturbing his appetite and digestion.

4. In asthma it gives relief which compares very favorably with the effect of the depressant narcotics usually given in such cases.

5. It was always found satisfactory in acute bronchitis, while all but the most obstinate cases of chronic bronchitis yielded readily to its influence.

6. Our experience with glycoheroin in laryngitis has been too limited to warrant any conclusions as to its value in this disease.

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Some Thoughts on Modern Medicine.[1]

By A. W. BAYLISS, M. D., Buffalo, N. Y.

IT CERTAINLY gives me great pleasure, and I consider it a great honor, to be with you today as president of this body of 2,000 physicians. Although I am not, strictly speaking, one of your graduates, we are all like the graft upon the older trunk. We receive our strength from the same source, and the duties we perform are the same general duties which fall to all of us; for we must all belong to the same family, as it is a known fact that you cannot graft a plum or cherry upon an apple tree and make it grow and flourish, but how easy it is to make different members of the same species grow and flourish together, and in the same way I hope we will continue to do, as we have in the past. Even if we, of old Niagara, have no alumni association, we have found a stronger parent tree to which we are engrafted and from which we are receiving the same strength and assistance as if we were of the parent tree itself.

It is my intention to speak today of some of the modern remedies and helps in the practice of medicine. Practically, the greatest change in medicine that has taken place since I

1. Presidential address at the 28th annual meeting of the Alumni Association, University of Buffalo, Medical Department.

graduated is the serum therapy, which has entirely revolutionised the treatment of some diseases, and a great amount of work is continually being done to perfect this line of treatment. Also, the passing from antisepsis to asepsis in surgery and obstetrics is quite an important departure from a few years ago. Much might be said of the change in operative technic, but I will not speak of that, as I am not a surgeon.

In regard to preventive medicine, this seems to be the beginning of that epoch, for, during the past few years, much work has been done, and I think in the next few years much more will be done, as the work yet to be accomplished is a great one. When we see the terrible death-rate from consumption and realise that with proper care this disease can be prevented from spreading as it does, then we see the necessity for renewed efforts along this line. Not only America has awakened to this danger, but all the civilised nations are doing much to prevent the spread of this disease. This has been brought about by the thorough and scientific study of pathology and bacteriology. I think we, as physicians, should at all times lend our support to any means that will help to prevent the spread of this terrible disease. There are many other ills that much can be done to prevent; but none, I think, has the importance of tuberculosis. When we call to mind our feelings ten years ago upon every call to treat a case of diphtheria, how our hands were tied, as we might say, and compare the confidence with which we now approach the same class of patients, what a contrast, and what a sense of security and confidence we feel if called in time. Imagine if you can our sensations when we can call on our consumptive patients with the same confidence and expectations.

One of the newer assistants we have in medicine, or rather an old one brought into use again, is electricity. This something has been used for centuries by physicians for the cure of disease, but never until within a few years has it come into such intelligent use. This being an abstract power, not visible, our ancestors could only see the effect and know from it that they were dealing with something which had been a source of study for years, but which they were unable to comprehend or to apply with any certainty of action. Now, with improved instruments, and with increased knowledge in its application, we know conclusively that we have something which we can apply as an assistant and see its immediate effect. Formerly it was necessary to take for granted certain assertions made by the investigators,

as the experiments made by them were too vague and tedious to be taken up by the busy practitioners; but since the discovery of the *x*-ray, we have evidence of the usefulness of this agent almost daily in our work. This is only one of the many ways of the daily use of this agent in medicine.

We must not think this factor is any different from others we have to deal with; that it can be used unintelligently or with carelessness. An expression we formerly heard is now seldom mentioned—namely, that "electricity will do no harm if it does no good." We have learned that harm can come from its use, for we occasionally find those who are electro-opposite, yet not so often as those whom we might call, for want of a more accurate term, electro-anemic. There is no way of determining who these patients are until we bring them into application with the electrical elements; neither can we formulate any rule unless at the same time we formulate many exceptions to it. This field is too wide to treat of all the uses to which electricity may be put, hence I will confine my further remarks to the *x*-ray and some of its uses.

Practically at no time has any means of cure come into such general use in so short a time as this, and yet this city was probably one of the slowest to adopt it. However, after it once took foothold, it became a popular electrical method. We have two means of exciting the vacuum tube—namely, the coil and the static machine, and they each have their advocates. I favor the induction coil, as it can be regulated with much greater ease than the static machine, which is one of the principal agencies of the use of the ray, both in radiotherapy and radiography; for we seldom have two cases that need the same current, and by being able to vary the strength of the current we can treat our patients as we wish, or intensify the tube if we wish to radiograph the deeper structures. Another indispensable part of the apparatus is a tube that can be regulated properly; for, unless we have this, several tubes of different penetrability become necessary in treating deep-seated tumors of the abdomen.

Then there are cases which must be acted upon differently, even if located upon the skin; in some cases we need the cauterising effect, while in others we desire simply the corrective change in the cell, which the long-continued use of the *x*-ray seems to produce; and these different features we cannot get unless we have some manner of varying the current strength. By changing the distance of the tube from the part treated, the

number and to a certain extent penetrability of the ray may be varied, but as the rays diverge from the disc, by increasing the distance from the object, a very few rays are obtained, which are much weakened by their passage through this resistance of the ever varying conditions of the air.

In the future many of the diseases for which we are using this treatment will be found not benefited by it, and others that are not considered suitable for it will derive much benefit from its application. We can find a proper field for its use only by continued experiment. As we do not know how it acts we must yet work in the dark, but I think the time will soon come when it will be proven that this light acts upon the abnormal cell growth, by assisting nature to return the cell to its natural normal condition. This may be brought about in two ways. First, by the slow, weak and oft-repeated treatment which seems to assist nature in its effort to throw off disease; and, second, by the more radical treatment in which we get nearly the cauterising effect of the light, destroying the cell, as you may say, and allowing nature to replace it with a normal one. This latter method is much quicker than the former, and I think more dangerous, as nature is not always equal to the tax put upon it. So much for radiotherapy. Much more could be said, but I must hasten.

In regard to the use of the Finsen light, or ultra-violet rays, our neighbors across the water are doing a great deal with it, but the cases in which they use it are not plentiful here. The principal use they make of it is in the treatment of lupus, rodent ulcer and a few cases of epithelioma. Within the past year there have been many improvements and changes made in the Finsen light. Some are made to act directly from the arc, while others are used with a coil and condenser, taking all the different forms that the fancy of the manufacturer may lead him to. One that I have seen is an arc light in which the carbons are combined with iron, from which they claim to derive a more effective action, but the experiments are too recent to determine this question with certainty. As this light is of no use whatever, unless the parts to which it is applied are made bloodless, and the most practical way of obtaining this is by pressure, and as this treatment takes from a quarter to half an hour, it requires the undivided attention of the operator for that time, which is very tiresome, much more so than the use of the *x*-ray, and with very few exceptions we can do the same work with the *x*-ray as with the Finsen light.

In regard to the use of the *x*-ray for diagnostic purposes, it would not be easy for me to dispense with it. Our sense of sight is practically one of the acutest of the five. We can educate our sense of feeling to a high state of perfection, but never to be equal to the eye; when we can see upon the negative or upon the screen fractures never known to exist, then we may surely say this opens up a new field for study. So far there has been little done in radiography of the soft tissues, yet something has been accomplished and more will be done in the future with the assistance of the plate maker, who, we hope, will in time be able to make a plate more sensitive to these rays. Then we may expect to be able to see the soft tissues and diagnosticate with the eye that for which we must now use the sense of feeling and the knife.

In conclusion, permit me to again thank you for the honor conferred upon me and to express the hope to be able to meet with you in the future many times, and especially to see the continued success of the Alumni Association, which can only be brought about by the same united action which has characterised the past history of its meetings.

592 SPRING STREET.

SPECIAL ARTICLE.

Saint Louis and the Exposition of 1904.

BY NELSON W. WILSON, M. D., Buffalo, N. Y.,
Genitourinary Surgeon, Buffalo Emergency Hospital.

IF ONE recalls pre-Pan-American days in Buffalo, when all eyes and thoughts were turned toward the embryonic City of Light, he will have a very fair idea of the present condition of St. Louis, where they are getting ready for an exposition which, while larger in scope and more lavish in the expenditure of ready money, will not be more beautiful than our own Rainbow City, nor more excellently managed. The West does things on a large scale, and the exposition will not be an exception in any sense of the word. There are acres upon acres of land, lawns, plains, hills and wooded slopes which will be transformed into perfect bowers of beauty and loveliness when the artificers of a modern age have completed their handiwork. There will be places which will remind one of the Pan; and

effects will bring back memories of delightful nights under the stars of electricity, for Henry Rustin is at work in the Mound City and is preparing wonders on wonders for the display of the marvels of electricity. And the midway, too, will be there, and the camels and the Turks and the Cingalese, and the rest of the naturally malodorous and unsanitary Oriental outfit, only at St. Louis there will be less trouble than there was at Buffalo, for the concession has been let to a gentleman with modern ideas and who promises to make his watchword "Cleanliness."

It was partly business and partly pleasure which took me to St. Louis recently. Naturally, I noticed the country, the farms and the types of people and the general breeziness and the lack of restraint, and the increasing freedom as the Wabash railroad carried me a step or two nearer the land of the setting sun. The fact that I traveled like a gentleman and paid my fare makes reference to the railroad a compliment, and not an obligation; and of a truth the management deserves a word of praise. Not because the trains are more luxurious than those of other roads, but because they are on the whole more sanitary, interested me more than anything else in regard to them. I suppose that because I was going from one exposition city to another, memories of Pan-American days rushed on me, and I longed to see the kitchen of that train and the food boxes and cooking apparatus; that, I presume, is one of the legacies of the Pan; and, all unannounced, the dining car conductor took me forward and showed me a group of colored cooks busy at the fires and pointed out the highest type of a cleanly and sanitary kitchen; where the cooking was done in a human manner and nothing was pawed over; and during the few moments I was in the place of appetizing dishes I saw the cooks wash and rinse their hands in clean water, not once, but many times. Thereafter I ate in the dining car with an easy mind.

Of course, everyone got a look at "the bridge" as the train went into St. Louis. There were a lot of expectant concessionaires on the train, a few "show men," who were on a still hunt for jobs; some others who were going on; and one Buffalo man who had "rheumatism" and was en route to Hot Springs to get "boiled out," and who damned everything with exposition attached to it. He wouldn't stop over and look at the grounds, not he. He had had an exposition in his own town and he was sick of them; they were no good, and he wanted none of them in his. And no wonder, for he was one of the annointed of the

croaker's club, which flourished in Buffalo during the entire exposition period, and this same man used to go into the grounds on a laborer's day pass, although he had money sufficient to live at his ease without work and sufficient besides to acquire "rheumatism." I imagine he got properly "boiled out," for recently I have seen him at home with a clear skin.

The little bit of business which took me to St. Louis was responsible for the spoiling of a great deal of pleasure; for hospitality was everywhere marked. When you go to St. Louis, be prepared to give yourself into the hands of your friends or displease them. St. Louisans take you bodily and make you one of them; you are at home. In some other cities you may be made much of if you're a big man; but if you have an introduction into St. Louis you are made much of even if you are only a little fellow in the profession. The doctors in that town take you by the hand and look you in the eye and say, "I am glad to know you;" and you feel that they are and that they haven't got a string to their welcome. Everywhere there is that delightful tinge of Southern accent, which means hospitality. There is a cheerful lack of narrowness either in business or society. The first impression is that the people are happy and prosperous, and they are, except when they get tangled up with one of the trolley cars, and then they get materially the worst of it. The trolleys in St. Louis make good time and incidentally help the undertaker. There were two persons killed during the three days I was in St. Louis, and only the company knows how many were injured. I was told by a doctor who is in position to know, that there were over 100 deaths and nearly 5,000 injured persons to the credit of the hungry trolley cars in St. Louis during the preceding year. Buffalonians do more or less kicking over the trolleys here, but we have no such bloody record as that, and the St. Louis company might with advantage to the people of the Mound City take lessons in management from Mr. Caryl Ely and his assistants in Buffalo.

I met Dr. L. H. Laidley, Medical Director of the St. Louis Fair, at the Pan-American, which he visited to look over the hospital and medical department, and the renewing of the acquaintance in St. Louis was most delightful. Naturally, Dr. Laidley is most deeply interested in preparing for the great crowds which are expected. He has a monumental task on his hands and he realises it. The conditions in St. Louis are widely different from those in Buffalo; everything will be on a grander

scale; there is more money available, and to the credit of President Francis be it said that he is willing to spend lavishly where the hospital and medical department is concerned. The hospital will be located near the entrance and will be larger than the Pan-American institution; it will need to be, too, for St. Louis is a hot town in summer and the heat will keep the house and ambulance staffs busy. Then, too, I think I may be pardoned my excessive pride, when I say that Buffalo is a far more sanitary city than St. Louis. Dr. Wende, as health commissioner, did much to assist Dr. Park in maintaining sanitary excellence at the Buffalo exposition.

St. Louis is, moreover, notoriously corrupt in a civic sense, and being throttled in the grasp of grafting politicians it is not at all certain that money appropriated by the city authorities for sanitary purposes, will be used honestly if handled by politicians. In that way Dr. Laidley is handicapped. He is a wide-awake, energetic man, full of sturdiness and high ideals; he is pushing and forceful, and plows ahead to a given point in his work, no matter how great the obstacles or how apparently insurmountable. He is doing everything possible to preserve the health of the beautiful city-to-be, and should the great misfortune of widespread disease make its appearance during the life of the exposition, he will be the man to meet and handle the emergency. Nothing but the handiwork of fate and a rotten political administration can prevent success, for Dr. Laidley and the officers of the fair are doing all in their power to make things clean and keep them so. Dr. Martin E. Sheets is the sanitary officer during the construction period, and Dr. Joseph G. Moore is in charge of the emergency hospital on the grounds. Naturally everything is at odds and ends now, yet in spite of existing difficulties the work done at the hospital is excellent. Another member of the medical staff at the present time is Dr. L. P. Walbridge, who is visiting physician.

Just now serious efforts are being made by the medical profession to bring about a gathering of the brightest minds in medicine of the world during the exposition, as a World's Congress. The preliminary work is in charge of a committee on an International Medical Congress, and I was honored by an invitation to meet the committee at the home of one of its members, Dr. W. E. Fischel, the chairman. The committee has what might be called a social session before taking up the real work, at which they lay aside all the cares of the day. Dr. Fischel is

much like Dr. Stockton in manner; pleasant, easy and self-contained, always inspiring confidence by the very ease of his bearing. Dr. Laidley is the serious side of the committee, although he has a fund of humor and is a well-spring of wit. Another member is Dr. Herman Tuholske, rather rotund, full of quaint sayings and oddities of speech; a laugh which makes him your friend; a man whose work in surgery has made him famous and whose rise in his profession reads like a romance; a close student and a hard worker. Dr. Frank J. Lutz was also present at the meeting. He is the surgeon of the gathering, a bright energetic man, whose every movement indicates the cool, alert, self-confident surgeon, that is, provided one knows he is a surgeon; otherwise one might say at first glance that he was a business man who controlled vast enterprises. These are the men who will bring about the congress if it is to be, and there is a fair prospect of success. It is designed to be one of the most remarkable gatherings in medical history, and when success crowns their efforts, as it assuredly must, New York State will be honored by able representation among the appointments.

At the St. Louis Club, with Dr. Laidley, I met the controlling spirits of the big fair, chief of whom is ex-Governor Francis, a man who does not impress one from casual observation as being possessed of such marvelous capacity for work as he has shown; nor as a man with more than the usual amount of executive ability. He sits low in a big, easy chair, and listens at times with a far-away look, apparently not paying the slightest attention to what is being said. He might be a star-gazer for all one could guess from looking at him; yet not a word escapes, and he absorbs every important detail of conversation; and when it is time for his decision he acts quickly and finally. There is no see-sawing with the president of the St. Louis Exposition. His grasp of affairs is marvelous, and he knows all the details of management of the various big expositions, with facts and figures at his tongue's tip; and while his aides carry slips of reminders of the business details of the St. Louis show, Mr. Francis has all his material stored away in the recesses of his mind ready for use at a moment's notice. It isn't hard when once you know the man and see him at work to understand why he is the absolute head, the dictator, of the movement. He sees everyone; no matter in connection with the work of the exposition is too small or too trivial for his consideration.

I imagine he has every salient point of every report in connection with the Pan indelibly fixed in his mind and ready for instant use. They were discussing the application of a concessionaire at Buffalo who was making efforts to get into St. Louis. His name was mentioned. Gov. Francis was looking nowhere in particular and giving little apparent attention to the discussion. When the concessionaire's matter had been threshed out he slowly, almost languidly, raised his eyes and said: "I don't think we had better consider that matter; Dr. Park's report at Buffalo did not speak very well of his concession if I remember correctly." The incident is mentioned merely to illustrate the type of mind which is controlling the workings of the fair. They are taking advantage of Buffalo's experience largely. Mr. Buchanan was there as the president's advisor, and the medical department was constantly referred to. Truly Governor Francis is a study and one marvels at the capacity of the man for work and his grasp of detail, when one considers that no important step is taken in the numerous departments in the beautifully classic Washington University buildings on the hill, which are being utilised as administration headquarters, without "the Governor" passes on it.

A fleeting visit to a city is unsatisfactory so far as hospital observation is concerned, yet during the brief time I spent in St. Louis I accompanied Dr. J. P. Bryson to the Mullanphy Hospital, under the management of the Sisters of Charity; a hospital which was the gift of the man for whom it was named; a man who came to St. Louis a poor and friendless Irish immigrant and worked with roustabouts on the levees. When he died he left an immense fortune, part of which went for the establishment and maintenance of the hospital, a splendid institution equipped with every convenience. Dr. Bryson is a typical Southerner with all the term implies, the gentility, the courtesy and the charming hospitality which characterises his people. Dr. Bryson's name is intimately connected with the advances in the surgery of the prostate; he has done an immense number of prostatectomies, and his success is second to none. He is a prolific writer on the subject and his descriptions of his own method are classics in the literature of genitourinary surgery. Dr. Bryson is professor of genitourinary diseases in Washington University medical department.

At the Marion-Sims-Beaumont medical college, Dr. Bransford Lewis is professor of genitourinary surgery. He is a young

man, but he has done an immense amount of original work. Probably his most valuable contribution is his invention of the instrument for ureteral catheterisation, which is generally termed a ureter-cystoscope. It was my good fortune to see Dr. Lewis use the instrument in collecting samples of urine from each kidney, and the ease with which the operation was performed was amazing. There is absolutely no possibility of mixture of the urines, and at the same time a complete cystoscopic examination may be made.

Truly, St. Louis is a delightful city, looking at it professionally. From an expositional viewpoint it will be a wonder city; politically it is stricken with a grievous malady, although a brave and honest man, Attorney Foulke, is cutting into the rotten tissues with fearless hand; and it is a matter of professional pride that every physician in St. Louis, irrespective of school, college or society, is giving his aid to purge the town of its corruption. Dr. Laidley began a fight some time ago for a better water supply, and there are at last grounds for hope that with the assistance of his brother practitioners, and the decent element of the city, success will come and the health and lives of St. Louisians will not be subservient to the grafter's greed.

49 NIAGARA STREET.

NOTE.—Since the above was written, Dr. Bryson has died; and in his demise the medical profession of St. Louis has lost one of its most prominent members, and the profession in general one of its most enthusiastic workers in the domain of special surgery. Reference to Dr. Bryson's death is made elsewhere in this issue.—EDITOR.

CLINICAL REPORT.

Multiple Abscess of the Liver.

BY E. L. RUFFNER, M. D.,
First Lieutenant and Assistant Surgeon, U. S. Army.

C. A. B., ex-soldier, inspector of customs for the Philippines, at Iloilo, Panay, P. I., aged 35; had lived in the tropics for about three and one-half years, or from the first occupancy of Iloilo by the American forces, as a soldier and in the customs department. He was first admitted to the military hospital at Iloilo, May 30, 1902, complaining of what was diagnosticated as acute pleurisy, right side, lower chest. He was in the hospital for ten days, being discharged June 10, 1902.

There was nothing to call attention to the bowel at the time. After being out about his business for about two months, as inspector of customs, he reëntered the hospital. This time he was suffering from pleurisy with effusion in the same area as that affected at the first admission—namely, the lower lobe of the right lung. He was in the hospital but one week, leaving this time at his own volition against advice.

December 12, 1902, he reëntered the hospital with pain and distress in the same place. Examination of the right chest showed dulness to flatness to third interspace in nipple line and corresponding position behind. No tenderness over the abdomen, urine normal, bowels having nothing to call attention to them, a cathartic being necessary. Liver found not enlarged, some cough, expectoration containing pus. After a few days in hospital, the temperature became such as to indicate pus. Leucocytosis present; malarial infection absent.

Exploratory aspirations were made in the chest at the ninth intercostal space, right side, mid-axillary line. Result unsatisfactory. This was repeated in a different area once again. It was thought at the time that it was because of a sacculated condition of the pleura that the results were so unsatisfactory. The patient's condition became steadily worse. The abdomen became tense, with tenderness over the hepatic area; the right side was chosen to lie upon as giving the most comfort at this time. Pain was complained of, radiating toward the right shoulder, of a dull, aching character. During this entire time the bowel had given no indication of trouble, and repeated questioning as to whether he had dysentery or bowel trouble during his long residence in the tropics, always gave the answer that he had never been troubled with them.

Preparations for operation for abscess of the liver were made. January 8, anesthetic given. But before exploratory puncture of the liver, I passed a large trocar into the pleural cavity at seventh interspace, mid-axillary line. Pus was found. I then did an exsection of two inches of the eighth rib. A large quantity of pus was evacuated. Drainage was left. Cultures of the pus did not show presence of ameba dysenteria. Side dressed twice a day, discharge getting less and less. On January 27, 1903, a diarrhea commenced. Examination showed numerous amebæ dysenteria present, and upon irrigation of chest with normal salt solution water would not return, nor was there any more discharge from drainage tube. An odor was also noticed in the opening in the chest wall.

February 3, 1903, patient died. Postmortem examination showed omentum small and adherent to the abdominal wall right iliac fossa. An old inflammatory tract was found, extending from cecum at the right iliac fossa up to the abdominal wall toward and to the liver. The colon and cecum between the ascending colon and abdominal wall were sacculated and surrounded by adhesions in the right iliac fossa, evidently an old

inflammatory condition. Upon tearing this loose, a pus cavity was found communicating with the gut and filled with old amebic ulcers. The appendix was normal.

Liver not enlarged to any great extent, adherent to pleura, right side, surface presenting scars. Large abscess, which had been drained by the opening into the pleural cavity. Upon section, liver found to contain a number of small abscesses. Amebæ dysenteria not found in them.

Pleural cavity, heart, left lung and left pleura normal. Right lung very shrunken and pressed into small area about its root. The lung with adhesions divided the chest into two cavities, the only communication being around the apex. Both cavities were empty.

An explanation of the foregoing conditions might be offered as follows: starting from an original abscess of the liver, undoubtedly due to amebic infection, rupture into the right pleural cavity took place and, not being able on account of adhesions to go clear up the chest wall, the pus burrowed down the right flank between the ascending colon and the abdominal wall, being walled in by adhesive inflammation, until it reached the right iliac fossa, the intestine being anchored and the line of least resistance, it emptied into the gut. It would thus account for the onset of the amebic dysentery five or six days before death, and the fact that the irrigation did not return from the opening in the chest and the character of the odor from the chest wound, which at this time was in communication with the intestinal tract, would further justify this conclusion.

That the patient, with this serious amount of damage, should suffer little pain and be able to work and keep upon his feet until five weeks before his death, is another strange feature of the case. A practical deduction from this case is that one should always suspect and look for abscess of the liver in tropical countries in any case presenting a pleurisy low down on the right side, even if that is the only symptom present.

Base Hospital, Iloilo, Panay, P. I.

Management of Premature Labor.—The usual precautions taken in normal cases should be observed, says E. P. Davis, with special care to avoid rupture of the membranes. When dilatation is but partly complete, use elastic bag or intrauterine tampon of aseptic gauze. If placenta is retained, antiseptic delay may be practised until spontaneous expulsion, if no hemorrhage occurs. If bleeding is present, anesthetise, dilate uterus and remove placenta completely.—*Medical Herald.*

SOCIETY PROCEEDINGS.

Buffalo Academy of Medicine.

Section on Medicine, Tuesday Evening, February 10, 1903.

Reported by N. L. BURNHAM, M. D., Secretary.

The medical section of the Buffalo Academy of Medicine held its meeting on Tuesday evening, February 10, 1903.

The second paper of the evening was read by Dr. Irving M. Snow, entitled

INJURIES AND INFECTIONS OF NEWLY-BORN CHILDREN.

The paper was divided into two parts:

I. *Infant Mortality in the First Month of Life.* — The first four weeks may be regarded as the most dangerous period of human life. Nearly one-tenth of the race succumb in the first month of existence. Unrecognised intracranial hemorrhage, atelectasis, or pneumonia are common causes of death in infants. The susceptibility to disease lessens with each month of life. Victims of congenital weakness, malformations, injuries of parturition, die first, and the surviving continually gain resistance to disease.

MORTALITY BY MONTHS OF THE FIRST YEAR OF LIFE—NORWEGIAN STATISTICS.

1st month	3.41 per cent.	7th month	.52 per cent.
2d month	.99 " "	8th month	.50 " "
3d month	.76 " "	9th month	.47 " "
4th month	.67 " "	10th month	.45 " "
5th month	.62 " "	11th month	.41 " "
6th month	.56 " "	12th month	.40 " "

Total, 9.76 per cent. in first year.

The same excessive death-rate exists in Buffalo. During the year ending December 1, 1902, 9.3 per cent. of all children born in Buffalo died in the first four weeks, and the death-rate in the first month forms 6.4 per cent. of the total mortality of these children; 38.5 per cent. dies in the first 24 hours; 30 per cent. in second to seventh day of life; 16.5 per cent. dies second week; 7.3 per cent. in third week; 7.6 per cent. in the fourth week.

In Norway, where the infant mortality is the lowest in the world, we find that among 1,000,000 births in the rural districts, from 1876 to 1898, the death-rate in the first month was 3.38 per cent. of all children born. In Prague the mortality in the

first month is 14.2 per cent.; in Prague hospital it is 3.3 per cent., showing conclusively that the life of the newly-born child is most favorably influenced by good midwifery and nursing. Statistics show that more children die with us from accidents of parturition, and fewer from infections, than in Europe. The mortality in early life is due to (1) immaturity; (2) malformations incompatible with life; (3) asphyxia and atalectasis; (4) injuries of parturition; (5) various infections. Cerebral hemorrhage is the most frequent lesion found in infants stillborn or dying soon after birth. Application of forceps, nipping of a cerebral sinus in forcible molding of the head, foot and breech presentations, softness of the skull and relaxation of sutures, are the most frequent agents in producing hemorrhage.

Dr. Snow reported a series of cases illustrating the clinical history of intracranial hemorrhage. The usual symptoms are cyanosis, rapid and irregular breathing, temperature, opisthotonic rigidity, quivering, automatic movements, convulsions, baby apathetic in the intervals of relaxation. The child may die in a few days or live to be a paralytic or an epileptic. The majority die before the fourth day. Treatment of intracranial hemorrhage is almost hopeless. Even if the convulsions are relieved, the residual disabilities are not lessened. Asphyxia and atalectasis are fertile causes of bronchopneumonia and formed 3.6 per cent. of causes of death in infants during the first month of life.

Sepsis is a frequent cause of death in the newly-born. The avenues of infection are the eye, ear, nose, mouth, skin, umbilicus, digestive and respiratory tracts. The healthy placenta is a perfect filter for germs. The amniotic fluid polluted by the examining finger, or other sources, is the greatest source of danger after the bag of waters is broken. The germ is generally the colon bacillus. Inflammatory conditions in the respiratory or gastrointestinal tracts may result. A majority of the infants dying in the first month have a bronchopneumonia. It is diagnosticated principally by objective signs, fever, cyanosis, and rapid breathing. There are no characteristic physical signs in the chest.

II. *Gastroenteric infections at birth.*—Gastroenteric infections at birth are frequent and important. Congenitally imperfect digestion exists in some babies. The digestive ferments are weak. The congested gastroenteric tract with a hypersecretion of mucus hinders the complete assimilation of food, favors

autointoxication or infection from without. The congenitally sterile gastroenteric tract is normally invaded by bacteria in fourteen hours after birth. Dr. Snow believes severe gastroenteric infection more frequent and fatal than inflammation of the umbilical region. In Buffalo, in the year ending December 1, 1902, there were among infants under one month 30 deaths from gastroenteric infection, and 40 from marasus and inanition—16 per cent. of the total mortality. Dr. Snow then reported 10 cases of gastroenteric infection. None of the mothers showed the slightest sign of illness, and he arrived at the conclusion that the infants were infected after birth. Nine of the mothers attempted to nurse their babies. In one the history of feeding was not noted. Five of the children died and five recovered. The vehicle of contagion is most probably either the milk of the mother or amniotic fluid contaminated by the colon bacillus. All but one occurred in private practice and among clean, intelligent people.

Treatment—Gastric and intestinal lavage, calomel, stimulation, hydrotherapy and a wet nurse.

DISCUSSION.

Dr. DeLancey Rochester opened the discussion, saying that he blamed the large infant mortality in a large number of cases to poor care after birth, and not to antenatal injury or disease. More care should be exercised by physicians in signing infants' death certificates.

Dr. L. Schroeter called attention to the injudicious use of instruments as a cause of cerebral hemorrahge in infants. He did not believe the statistics were reliable. Many stillborn children among the Poles and Italians, on account of religious belief, are baptized in utero on the hand, the foot or any presenting part of the fetus, or even the cord, by midwives, and these cases swell the number of infants classed as having died within a few days after birth. Syphilis of the newborn is not frequently stated on death certificates, even when it is known to exist.

Dr. F. Thoma referred to nephrolithiasis as a probable cause of death in some infants who die within 40 to 72 hours following suppression of urine.

Dr. A. J. Colton referred to hemorrhage of the bowels, strangulated hernia, hematuria, probably due to uric acid occurring in his practice and causing death in infants.

Dr. J. S. Jones thought we should consider heredity as an etiological factor in infant mortality. An improperly nourished pregnant woman cannot be expected to be the mother of a well nourished child capable of resisting disease.

Dr. B. G. Long said the statistics reflect rather discreditably upon Buffalo, and thought they were unreliable. Norwegians have not large families. We have a mixed population.

Dr. Rochester, replying to a question from Dr. Snow, said that the use of chloroform upon the mother during labor did not act as a cause of death of the child. He always uses chloroform unless otherwise requested, and does not use forceps in 5 per cent. of his cases.

Dr. Snow closed the discussion. Amniotic fluid polluted by the examining finger may be the cause of death in the newly-born. Aspiration pneumonia is sometimes a cause. The meconium is sterile for 14 to 15 hours after birth. The Norwegians are a very prolific race. Rachitis is extremely common in Prague, where the mortality in the first month corresponds with Norway. Cerebral hemorrhage is a frequent cause of death in infants. Uric acid infarcts do not cause death.

Replying to Dr. Schroeter, he said he did not think congenital syphilis common in Buffalo, as it is exceedingly rare in the newlyborn at the Erie County hospital. He does not think stillborn children are reported as of full term. He thinks the statistics are correct. The point in regard to the injudicious use of forceps is well taken.

Fellows present, 18. Meeting adjourned 10.30 p.m.

Stated Meeting, May 26, 1903.

Reported by F. W. McGuire, M. D., Secretary.

A stated meeting of the Academy of Medicine was held Tuesday evening, May 26, 1903. The president, Dr. Herman E. Hayd, called the meeting to order at 9 p.m. The minutes of the last stated meeting, held March 31, 1903, and the minutes of the special meeting held May 20, 1903, were read and approved.

On motion the meeting was adjourned for ten minutes to allow the section on obstetrics and gynecology to elect officers for the ensuing year.

The program of the evening was furnished by the section on obstetrics and gynecology, which was as follows:

SHOULD THE UTERUS BE REMOVED WHEN OPERATING FOR DOUBLE PUS TUBES? Matthew D. Mann, M. D.

PROPHYLAXIS IN OBSTETRICS. Ludwig Schroeter, M. D.

These papers were discussed by P. W. Van Peyma, W. Hartwig, M. C. Breuer, S. Goldberg, E. E. Blaauw, H. B. Singer, F. W. McGuire, Herman E. Hayd, and Matthew D. Mann.

Attendance, 20. Adjourned at 10.30 p.m.

Alumni Association, University of Buffalo — Department of Medicine.

REPORTED BY THOMAS H. McKEE, M. D., Secretary.

The twenty-eighth annual meeting of the Alumni Association of the University of Buffalo was called to order in Alumni Hall by the president, A. W. Bayliss, at 2.30 p.m., May 5, 1903.

After the reading of the minutes of the previous session, and receiving reports of officers and various committees, the meeting proceeded with the election of officers for the ensuing year with the following result: president, A. W. Henchell, '89, Rochester; 1st vice-president, Fridolin Thoma, '87, Buffalo; 2d vice-president, Henry T. Benham, '90, Honeoye Falls; 3d vice-president, Jane W. Carroll, '91, Buffalo; 4th vice-president, George W. Himmelsbach, '91, Buffalo; 5th vice-president, C. J. Reynolds, '90, Buffalo. Board of Trustees—D. A. Currie, '64, Englewood, N. J.; A. W. Bayliss, '89, Buffalo; William Warren Potter, '59, Buffalo; D. W. Harrington, '71, Buffalo; F. H. Moyer, '72, Moscow. Representative on the Council—Ernest Wende. Executive Committee—Albert T. Lytle, '93, Chairman, Buffalo; Grover W. Wende, '89, Buffalo; Franklin W. Barrows, '93, Buffalo; A. W. Henchell, *ex-officio*, Rochester; John Parmenter, *ex-officio*, Buffalo.

By request of Dr. Stoddard, who was unavoidably absent, Dr. Mann read a memorial of Dr. William H. Mason, formerly professor of physiology in the university.

IN MEMORIAM—WILLIAM H. MASON.

On June 1, 1902, passed away at Vergennes, Vt., Professor William H. Mason, who for many years filled the chair of physiology in this institution.

Professor Mason was born in New England, of Puritan ancestry, and his early life was spent, and his literary and classical education pursued, amid the traditions of that sturdy section. Endowed with a fondness for the natural sciences and for physical research, he adopted the profession of medicine as his life work. His medical studies were terminated at the medical department of the University of Buffalo, where he received the degree of Doctor of Medicine in 1859.

On the completion of his medical course, he settled for a short time in Buffalo, N. Y., whence he went, subsequently, in company with Dr. Austin Flint, Jr., to Europe, for the purpose of pursuing further the study of physiology. He was, for a considerable time, a pupil of M. Claude Bernard. Returning from this period of foreign study and observation, he settled in Norwich, Conn., where he subsequently married Eliza Whittaker, daughter of the late Horace Whittaker, of "Sunnyside." In 1861, he accepted the position of professor of physiology in the University of Buffalo, which chair he filled most acceptably during the period of twenty-five years, finally resigning in 1886.

As a teacher, Professor Mason was earnest and forceful, and believed in and pursued physical demonstrations as essential to the comprehension of complicated physiological deductions. He was of a retiring disposition. This characteristic led him to decline any position which would bring him into prominence. Endowed with native ability and with quick perceptions, his fondness for study kept him apace with the most progressive thought of his time. Of domestic tastes and inclinations, his devotion to his home was marked, and to the members of his family, and to those whom he admitted to a personal friendship, he was ever loyal and devoted.

The last ten years of his life were saddened by the death, successively, of his daughter, wife and son. The breaking up of his home and of the ties, which had so long held him to it as the center around which the events of his daily life had clustered, rudely disturbed the current of a quiet life and made each succeeding year bear more and more heavily upon him, until he sunk beneath the increasing weight of the burden and passed quietly away.

This brief memorial is the earnest tribute of one who, for seventeen years, was associated with Professor Mason as a colleague, and who enjoyed his confidence and friendship. The sadness and regret which we feel in the passing away of our friend, is deepened by the thought that his last years were darkened by the sombre shadows of great sorrow, and passed in seclusion far from the scenes of the happiest portion of his life.

Professor William T. Sedgwick, Ph.D., of the Massachusetts Institute of Technology, then presented very comprehensively the subject,

PROTECTION OF PUBLIC HEALTH BY FILTRATION OF MUNICIPAL WATER SUPPLIES.

The paper was discussed by Drs. Walter D. Greene, commissioner of health, H. M. Hill, city chemist, H. U. Williams, professor of bacteriology, University of Buffalo, Dr. Campbell, of Niagara Falls, and Dr. Fell, of Buffalo.

On motion the meeting adjourned sine die.

PROGRESS IN MEDICAL SCIENCE.

Genitourinary and Syphilitic Diseases.

Conducted by BYRON H. DAGGETT, M. D., Buffalo, N. Y.

BLADDER DRAINAGE.

Reginald Harrison (*Polyclinic*, London, September 17, 1902). Abstract. The power to completely empty and drain the bladder voluntarily of its contents is a natural act, which cannot be regularly averted without exposure to some risk.

1. What disorders may result from imperfect drainage by natural efforts?
2. How may artificial drainage be best effected?
3. What conditions call for the regular use of the catheter?

In children nature has provided for bladder drainage as perfectly as possible. In adults of middle life there are seldom any alterations of structure which interfere with drainage, except stricture or abnormal growths. In more advanced life, when the sixties are reached or before, there is a tendency to some sinking or relaxation of the bladder wall, which renders drainage or emptying the bladder imperfect. This condition, causing incomplete drainage of the bladder, is not uncommon about the age of 60, though physical evidence of prostatic enlargement may be still wanting.

Apart from the changes occurring at different periods of life there are disorders directly due to undrained or stagnant urine. Apart from disturbances such as frequent urination and overflow of urine, there are a number of abnormal urinary conditions which may be classified as (1) intravesical, or those happening within the urinary apparatus; and (2) extravesical, or those due to disturbance of structures in relation to, but outside of the urinary tract.

The intravesical disorders are cystitis, suppuration and ammoniacal decomposition, causing dilatation of the ureters and pelves of the kidneys, distortion of the bladder by formation of

trabeculæ, pouches and sacs. By retention and decomposition of the urine the urinary mucosa may become suppurating surfaces. Phosphatic stone may form in the undrained bladder; it is very prone to reform in residual urine.

Extravesical effects of undrained urine: extravasation of urine into the tissues—acute and chronic. (To be considered later.)

Bladder drainage is usually practised by means of catheters. Of these there are a large variety, and they should not be used without professional advice and caution necessary in their employment. Catheters should not be used in place of bougies for dilating strictures or for preventing their recurrence, lest the expulsion powers of the bladder be impaired. Sometimes catheter drainage and irrigation are inefficient, and the bladder must be opened either through the perineum or above the pubis, if the obstruction be due to an intravesical growth; otherwise the perineal route is the one of choice.

As a temporary measure for the relief of overdistension and in other conditions, catheterisation is proper, but in cases of a moderate degree of residual urine from senile prostate or other causes, one should be guarded lest catheterisation, once began, ends only with death. The presence of residual urine does not call for catheterisation, unless the patient be suffering from straining or frequent acts of masturbation. Rising once or twice at night, and corresponding calls during the day, do not warrant interference by catheterisation, lest catheter life be established. Incontinence and decomposition make a necessity of drainage by catheter or otherwise.

Therapeutic Notes.

Conducted by NELSON W. WILSON, M. D., Buffalo, N.Y.

BUTTERMILK, A FOOD FOR INFANTS.

Baginsky, in the *British Medical Journal* of September 6, 1902, says he was at first reluctant to test the value of buttermilk for infants, as recommended by Dutch physicians, and therefore began sparingly in July, 1901, to use it in cases which failed to improve upon sterilised or modified milk; as improvement followed, he used it freely for other infants. From his experience he concludes that buttermilk is a good food for acutely and chronically sick infants. It is well borne after attacks of acute

dyspepsia and summer diarrhea. In chronic diarrhea and chronic enteritis it may be looked upon as a life-saving preparation. He has never seen any disturbances of nutrition. The buttermilk used was made from pure cream, which was soured by means of bacteria producing lactic acid fermentation. The method of preparing the buttermilk previous to its use is fully described.

CARDIAC OR RENAL DROPSY.

SHOEMAKER considers the following an excellent mixture in the dropsy due to cardiac or renal disease:

℞	Bitartrate of potash	15.0	℥ss.
	Fl. ext. convallaria	6.0	℥iss.
	Simple syrup to make	120.0	℥iv.

CONVULSIONS OF OBSCURE ORIGIN.

IN THE *Bulletin General de Therapeutique*, Perier gives the following routine in the treatment of convulsions in children: (1) loosen the clothing, so that the neck, thorax and abdomen are exposed, and lay the child on its back. If there is constipation, a rectal injection of oil, glycerin or soap should be given. (2) If there is indigestion, provoke vomiting by tickling the uvula and then give a purgative injection. (3) At the same time make the patient inhale a few drops of ether or chloroform from a handkerchief and open the windows. (4) If the convulsions are prolonged, a hot bath or mustard bath should be given; the patient should then be dried quickly; in order to prevent a return of the convulsions, one teaspoonful of the following solution should be given every hour:

℞	Potassium bromid	.50	gr. vii. ss.
	Sodium bromid	.50	gr. vii. ss.
	Ammonium bromid	.50	gr. vii. ss.
	Syrup of codeine	5.00	gtt. lxxv.
	Syrup of orange flowers	32.00	℥i.
	Lime juice	96.00	℥iii.

In the event of the child being unable to swallow, use this injection by rectum:

℞	Musk	.20	gr. iii.
	Chloral hydrate	.30	gr. iv.ss.
	Camphor	1.00	gr. xv.
	Yolk of egg	10.00	℥ii.ss.
	Distilled water	96.00	℥iii.

or a suppository as follows:

℞	Chloral hydrate or hypnal.....	.20 to 66	gr. iii. to x.
	Cacao butter	2.00	gr. xxx.

(5) The child should not be left alone until the convulsion is ended, which is indicated by the voiding of urine. Then search for the cause.

TREATMENT OF WHOOPING COUGH.

MONTI gives a very good review of the treatment of whooping cough in the *Bulletin General de Therapeutique*, which he divides into general and local. Under the first heading, he advises that the patient be placed in a well lighted and well aired room, the temperature of which should not go below 64° and not above 68° F. If possible, the child should be taken to a temperate climate during winter. Temperature variations should be avoided in any event. Locally, inhalations of boric acid and sodium salicylate are recommended, although Monti personally prefers inhalations of carbolic acid and menthol with quinine internally. The following formula of Birch-Hirschfield's is used by Monti:

℞	Carbolic acid.....	2.00	gtt. xxx.
	Pure menthol.....	1.00	gr. xv.
	Distilled water.....	192.00	℥vi.

24.00 (drams vi.) of this solution should be inhaled each day.

In the internal treatment belladonna is prescribed thus:

℞	Powdered belladonna	.01	gr. i.ss.
	Sodium bicarbonate	1.50	gr. xxii.
	White sugar.....	1.50	gr. xxii.

To be taken 1 to 3 times each day in a capsule.

Monti has found quinine to give the best results in his experience, which is large. His formula follows:

℞	Quinin tannate.....	1.00	gr. xv.
	Sodium bicarbonate.....	1.00	gr. xv.
	White sugar	1.00	gr. xv.

Divide into six (6) powders.

Dose: One every two hours.

HYPODERMICS FOR HERPES ZOSTER.

SCHARFF, in *Le Progres Medical*, advocates hypodermic injections in the treatment of herpes zoster. He uses this formula:

℞	Cocaine hydrochlorate.....	0.12 to 0.24	gr. ii. to iv.
	Morphine hydrochlorate	0.03	gr. ss.
	Salt.....	0.24	gr. iv.
	Distilled water to make	120.00	℥iv.

Injections should be made in the intercostal spaces near the exits of the nerves.

LIEBREICH'S SCABIES OINTMENT.

THERE are few preparations which are so universally successful as Liebreich's ointment in the treatment of scabies. It is as follows:

℞	Liquor stryax	15.0	℥ss.
	Olive oil	30.0	ʒi.

Directions: Rub well in, night and morning.

HOW PROPERLY TO MAKE TOAST.

IN that very valuable work, "How to Cook for the Sick," are these directions for making toast, a bit of sick room cookery which is too often disregarded, and in the majority of cases improperly done. How many times has the physician found chunks of boggy and sodden, discolored bread, which has been manipulated over a flame; or pieces of fresh bread, which had been burned in an effort to make it crisp? Here is how Sachse directs toast to be made, and it cannot be improved upon. It should be given to the patient's cook—especially if there is a gas stove in the house:

The object of making toast is to convert the starch into dextrin, giving the starch its first step toward digestion and the agreeable toast flavor. The bread must first be thoroughly dried, or it cannot be brought to 400° F., the dextrinising temperature. Toast is therefore crisp to the center and a golden brown. It can be easily broken, is quickly moistened by the saliva, and, what is an advantage with invalids and children, it requires mastication.

ABSTRACTS.

Further Investigations Concerning Streptococci.[1]

BY DR. HANS ARONSON.

FORMER experiments led the author (*Münchener Med. Wochenschrift*, April 7, 1903,) to the conclusion that there are no specific differences between the streptococci found in various infections, such as erysipelas, scarlet fever, articular rheumatism and sepsis.

1. Read at the Society for Internal Medicine, Berlin, March 23, 1903.

All streptococci may cause joint and heart affections in horses. The serum of a horse immunized with a certain variety of streptococci protects against and agglutinates in the same manner all streptococci.

In his more recent experiments, Aronson employed twenty different varieties of the streptococcus. They were administered to horses without previous animal passages, and their agglutinative powers were tested and compared with the immunising serum and that obtained from other streptococci. The agglutination must be macroscopically visible to be convincing. The experiments showed that horse serum markedly agglutinates only the material with which it has been treated; it does so little or not at all with other streptococci, even when they come from the same human disease. Agglutination is, therefore, an individual reaction. The specific nature of the scarlatina streptococcus cannot be demonstrated; therefore there cannot be a specific scarlatina serum.

A long series of experiments on mice, rabbits and dogs, proved that it is impracticable to prepare a serum from streptococcus cultures directly derived from human beings. He therefore adds to his serum, which is equably directed against all streptococci, and is obtained by treating a horse with highly virulent streptococci, a fluid produced by immunisation with streptococci taken directly from human subjects. Exact measurement of the latter has not yet been possible. A uniform action can only be secured by mixing the sera of different horses and by the use of numerous races.

In discussing this paper, Prof. A. Baginsky stated he had used Aronson's serum in 56 further cases of scarlet fever since his report to the Berlin Medical Society. The epidemic was a very severe one, for many of the other cases admitted at the same time into the hospital had bad sequellæ (glandular abscesses, hemorrhagic nephritis, and the like). He had gotten the distinct impression that many cases which were severe in the beginning, ran their course without complication by reason of the influence of the serum. The Aronson serum is at all events entirely innocuous; in suitable cases it fully deserves a trial in doses of 20 to 50 c.c.

Acetozone as an Intestinal Antiseptic in Typhoid Fever.

Frederick G. Harris, Chicago, (*Therapeutic Gazette*, March, 1903,) reports 128 cases of typhoid treated in Cook County

Hospital, Chicago, with acetozone. The cases first admitted seemed to indicate that the epidemic was of a mild form, but later the disease proved to be of a severe type and complications were numerous. The author obtained the most satisfactory results with aqueous solutions of 15 grains to the quart, which the patients were urged to use very freely to quench the thirst, while in addition four or six fluid ounces of the solution were given every four hours as a therapeutic measure. The movements of the bowels were regulated with sodium phosphate or magnesium sulphate. The temperature of the patients, on admission, was high, as a rule. In 117 cases under acetozone treatment the average duration of the fever was 18 days.

The number of recoveries was 117, or 91.4 per cent., while 11 patients died, a mortality of 8.59 per cent.: statistics of the cases of typhoid fever in the same hospital (Cook County) not treated with acetozone show a death-rate of 13.1 per cent. The author is of the opinion that under the acetozone treatment, in favorable cases, the duration of the disease was materially shortened, and the most disagreeable symptoms were ameliorated. He declares that the characteristic fetor of the stools and the peculiar odor of the wards was greatly diminished; there was less stupor and delirium and less tympanites, and the usual diarrhea was checked. An average of 138.12 grains of acetozone was used in each case. Finally, he reaches the conclusion that when cases can be seen during the first week of the attack and large amounts of acetozone given, assisted by a gentle laxative, the temperature will return to the normal in from ten to twelve days.

Four cases of typhoid fever, in which acetozone was employed with satisfactory results, were reported by Charles Emil Brack, Baltimore (*Medical Age*, January 25). In each case the treatment consisted in the use of acetozone in solution. The first three patients, adults, received 30 grains of the drug per diem; the fourth, a child of 4 years, received 8 grains each 24 hours. Prompt recovery occurred in each case.

James Billingslea, Baltimore, (*Atlanta Journal-Record of Medicine*, February, 1903,) reported twenty-five cases of typhoid fever treated with acetozone. The diagnoses were confirmed by board of health examinations. The treatment consisted in clearing the bowels thoroughly by means of calomel. Liquid diet was prescribed and cold or sponge baths were used as occasion required. The special treatment consisted in shaking 15 or 20 grains of acetozone powder with one quart of water, allowing

the insoluble residue to subside. The patient was given the clear solution to drink freely, the whole amount of one quart being taken during 24 hours. The writer suggests that one part of the acetozone solution may be mixed with three parts of milk, if thought desirable. The action of acetozone will be materially aided by the use of a mild saline laxative.

He found that the feces soon lost their disagreeable odor by this treatment, and cold baths were required to a much less extent than with other treatment. Furthermore, the nurses universally affirmed that they found patients under this treatment easier to care for. No evil effects were noted from the use of acetozone.

A further contribution to this subject appears from the pen of J. J. Driscoll, Chicago, (*Kansas City Medical Index-Lancet*, January, 1903,) who relates his experience in six cases. He found that acetozone reduces the temperature, shortens the duration of the disease materially, while it does not seem to have any ill effects on the heart. The feces are completely deodorised in 36 to 48 hours, and tympanites rapidly disappear.

Treatment of Diseases of Metabolism.

St. Just (Paris, France,) says: Diseases of metabolism include those principally, the nature of which depends upon insufficient assimilation of the ingested food stuffs, diseases, such as gout, diabetes mellitus, obesity, anemia, chlorosis, and the like. When, owing to deficient metabolism, the various parts of the human organism become affected or weakened to such an extent that they are no longer able to protect themselves against toxic effects, there will occur diseases of the liver and kidneys, digestive disturbances, tuberculosis, rheumatism and nervous affections.

The treatment of all these diseases has long since been directed toward removal of the causative agent, by proper nutrition and by adherence to ascertained diet, which was regulated according to the various pathological symptoms.

The anemics and chlorotics were given strengthening food; the adipose were prohibited from eating fatty meats; the diabetics were not allowed to eat sugar and related substances, such as bread; the gouty subjects were to abstain from too much meat, because the latter favored the formation of toxins, owing to its abundance of nucleated cells; the neurasthenics had to do with-

out blood-irritating substances, such as bouillon and certain kinds of meat, beer, coffee, and the like, to avoid further irritation of their overtaxed nerves, and so forth.

Although such abstinence cures are most disagreeable to the patient, it cannot be denied that they generally cause a rapid diminution of the morbid symptoms. But the improvement does not last long. As soon as the patient returns to his old mode of living, his disease reappears in its fullest extent. Permanent cures were accomplished but rarely, even when the patients adhered to the prescribed diet for months and years.

We find the explanation of these important facts, if we consider the real causative agents of all these affections. According to the kind of disease, various portions of the human organism have lost their ability to properly assimilate the ingested food, and this causes, in some of the above named diseases, a deficiency of such substances as are necessary for the proper thriving of the human organism, as in the anemic and in the chlorotic. In other affections, there remain in the human organism unassimilated, injurious portions of the ingested food stuffs, which then find expression as gout, diabetes mellitus, neurasthenia, and the like. Briefly, the cells of the human organism have lost their energy properly to functionate.

This energy, however, is imparted to the cells solely by the oxygen, of which ample quantities are present in the air, and which is inhaled through the lungs. The just recognition of this fact was the cause of making such patients take plenty of outdoor exercise, thus materially increasing the capacity of the blood and of the lungs to absorb oxygen.

Under the present day industrial conditions, however, many of the people are not able to adequately breathe in the open air, hence this capacity of the lungs to absorb oxygen is only a limited one. Dr. Friedrich Elias, a chemist of Berlin, has succeeded in producing a true magnesium dioxide, which contains abundant quantities of diffusible oxygen, and which enables the practitioner to administer any desired quantity of this important element of life. Besides, this new chemical agent, which is called biogen, contains oxygen in active form, and it can, therefore, exert a much greater energy than the frequently contaminated, inactive oxygen of the air. This plentiful administration of oxygen imparts increased vigor to the cells of the human organism; they regain their former ability to assimilate ingested substances and to properly functionate again. Not

only do the external morbid symptoms disappear as a result of the use of biogen (Mg O_2), but a thorough and permanent cure is accomplished in all cases of oxygen hunger. In failing compensation of heart disease and all attacks of dyspnea, however caused, biogen parts freely with its high percentage of oxygen, and supplements pulmonary respiration. In emergencies, large doses may be given and maintained with impunity and with no consequent deleterious effect. In combined heart and kidney lesions, in all conditions of defective elimination, rheumatism and gout, prompt relief is secured from the increased supply of oxygen which the patient receives, and this new agent, biogen, has a distinct and pronounced value. In cases of pneumonia, asthma, tuberculosis and diabetes mellitus, it will be found specially effective.

Felsin in Dyspepsia.

J. A. CLEMENT, Baltimore, says he does not regard the word biliousness as a scientific expression, but as the laity know what it means, or think they do, it cannot easily be stricken from the vocabulary. He regards the new preparation, felsin, of the Viskolein Co., as a useful remedy in certain forms of dyspepsia, especially when associated with biliousness.

He reports results in four cases. In each one of these he used felsin and nothing else. He wished to test the value of the preparation, hence these cases show bona fide results from the use of the felsin.

Case I.—Mr. G., aged 40; occupation, patrolman. This patient is so situated that his meals are taken very irregularly and, as a rule, hurriedly. Natural result—dyspepsia. On January 18, 1903, called for prescription; complained of accumulation of much gas and rumbling in abdomen, pyrosis, bad taste in mouth, a sensation of "a rock in my stomach," bowels irregular and slight frontal headache. Gave felsin tablets, one after each meal and one at bedtime. February 1st, reported that he had received considerable relief. Continued the prescription. February 7, reported all symptoms cleared up with the exception of the constipation, which was improving. Ordered felsin, one tablet after meals, for an indefinite time.

Case II.—Mr. M., aged 53; no occupation. He belongs to that class of dyspeptics who are imprudent, both in eating and drinking. His main complaint was excessive flatulence, bilious headache and constipation. Gave felsin tablets every four hours for three days, then one tablet after each meal and one at bed-

time. The flatulence disappeared in two days, the headache in three and the bowels are beginning to act as they should. The tablets acted in this case very nicely. From the patient's description, he had about run through the list of digestives.

Case No. 3.—Mrs. C., aged 65. For three months past has noticed that if she takes anything more for supper than a cup of tea and a cracker or two she would awaken next morning with headache and more or less nausea. Also reported chronic constipation. Ordered felsin tablets after each meal and on going to bed. The first two mornings after using the tablets awakened with headache, but no nausea. Has now been using the tablets two weeks and can eat a moderate meal at night with no bad results next day.

Case No. 4.—Mrs. D., aged 24. Four months advanced in first pregnancy; complains that everything she eats creates gas, which she finds it difficult to get rid of. Complaints of pregnant women, of course, must be taken with a grain of salt, but I prescribed felsin, one tablet after meals. After eight days' treatment she reported that she had no more difficulty with the gas and that now she can't get enough to eat. Evidently felsin in this case relieved the gas and stimulated the appetite.

A Method of Examining the Pulmonary Apex.

AULD has devised a method of examining the pulmonary apex, which he thinks yields trustworthy results in the very earliest stage of phthisis. The apices of the lungs extend on an average from 1 inch to 1½ inches above the clavicles and in some cases 2 inches, the right apex being a shade higher than the left. The method consists in outlining the resonant area above the clavicles. The key to the detection of incipient diseases in the apex is familiarity with the physical signs yielded in health. With deep inspiration, the upper area of resonance is a quarter of an inch higher than during forcible expiration. If the pulmonary apices be examined in this comparative manner, any deviation from the normal standard, any evident disproportion, either in respect of the characters common to both sides, may be justly regarded as a ground for suspicion. The early indications of abnormalities are (1) failure of the upper line of resonance on one or the other side to ascend during a deep inspiration; (2) a lowering of the upper line of resonance in whole or in part as compared with that of the opposite side; and (3) indistinct definition of the upper or outer line of resonance.—*London Lancet.*

BUFFALO MEDICAL JOURNAL.

A Monthly Review of Medicine and Surgery.

EDITOR:

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges should be addressed to the editor: 284 FRANKLIN STREET, BUFFALO, N. Y.

VOL. XLII.—LVIII. JULY, 1903. No. 12.

Consolidation of Two Prominent Journals.

DURING the past month the consolidation of the *New York Medical Journal* and the *Philadelphia Medical Journal* has been accomplished. The editor of the former, Dr. Frank P. Foster, who, indeed, becomes the editor of the united journals, announces the purposes of the union in an editorial article published in the issue of the amalgamated journals of June 20, 1903, in the following graceful manner:

In bringing about the consolidation the publishers have not been actuated solely by a desire to enlarge the subscription list, though they do not profess to have been unmindful of the advantage to be derived from such accretion. They have cherished the far higher purpose of combining and furnishing to an enlarged circle of readers all the features thought to be of special value in the two journals. We shall exert all possible efforts for the realisation of this purpose.

Before the consolidation the *New York Medical Journal* was free from all commercial influence, and so was the *Philadelphia Medical Journal*. Two journals more harmonious in their aims and methods do not exist, and it is most fitting, therefore, that they should so combine their resources as to further those aims and improve those methods to the utmost. This we believe to be wholly feasible under the unification of the two. Fortunately, the two cities, New York and Philadelphia, are of such ready access to each other that we apprehend no difficulty in dealing with medical matters of local interest in each city, especially as we shall maintain a Philadelphia office at which the editor will frequently be present. If New York is the larger of the two towns, and therefore presumably the scene of more events, we do not for a moment forget that Philadelphia is conspicuously glorious in the annals of medicine or that she is destined to be forever a leader in the progress of our profession.

We shall see to it that she is fittingly represented in our columns.

We have a few words in particular to say to the readers of the *Philadelphia Medical Journal*—a host of cultured and progressive physicians. They have done well to subscribe to such an excellent journal. Let us assure them that their favorite periodical is not to be merely absorbed—snuffed out, so to speak. Though it loses its distinctive title, it will perpetuate itself as an integral part of our united publication, even as a woman, when she marries, does indeed lose her father's name, but parts with not one whit of her individuality or of her influence. We have received from the accomplished editors of the *Philadelphia Medical Journal* a clean and able journal; we shall endeavor so to sustain its excellence as to merit the continuance of its patronage.

The time has arrived, in our view, when the aggregate number of medical journals should be reduced, and we have no doubt the action above delineated will prove advantageous to all parties concerned. In this spirit we beg to offer our congratulations to the editor and publisher of the consolidated journals referred to in the foregoing announcement.

The Principles of Medical Ethics.

IT IS now a widely-known fact that the American Medical Association, at New Orleans last May, completely reversed the position to which it has clung so long in relation to the code of medical ethics. We made comment on this action at considerable length in the June issue of the JOURNAL, and need not further enter into a discussion on the subject now; but, inasmuch as the medical journals throughout the country are dealing with it in almost unanimous approbation, we invite the attention of our readers to the two views which are here reprinted,—one from the east, the other from the west,—and which, though differing in details, yet both reach the same general conclusions.

THE AMERICAN MEDICAL ASSOCIATION AND THE CODE OF ETHICS.

[*Post-Graduate*, June, 1903.]

The American Medical Association has again spoken on the subject of ethics. Essentially the old code, as held by the New York State Medical Association, was presented by the committee appointed for that purpose, of which Dr. Ellsworth Eliot Harris was the chairman. This code was of the same general character as the one over which a controversy has been going on in the State of New York for a number of years, and yet

more liberal as to consultations. Through the vigorous efforts of Dr. Reed, of Cincinnati, the name of Code was changed to the Principles of Ethics, and the subject of ethics and discipline was left to each State. Here the American Medical Association dodged an opportunity. The only proper course was to have made no mention of a code or principles of ethics. If the committee from the New York State Medical Association had been willing to do this, as everybody knows, the rest of the American Medical Association would have gladly accepted the proposal, but the seceding organisation of the State of New York could not allow its much treasured code to die so easily. After a long discussion, Dr. Reed's ideas were adopted, and the Principles of Ethics of the American Medical Association were made the report of the council and adopted unanimously by the association. The action of the Medical Society of the State of New York in finally declining, after three years discussion, in 1882, to make the old code a part of its by-laws, and finally in abolishing the written code, has been abundantly justified by this action.

The American Medical Association has virtually accepted the New York idea, and our society is vindicated from the unjust aspersions of the former body, which refused to receive our delegates after we had done less in the way of abrogating a code, than the association itself has now done. There is now nothing for the New York State Medical Association to do but to disband. It was organised to sustain the old code, but the old code died in 1882, and is now decently buried, our state association being the only mourners. Its members, who are not already members of the state society, will be very welcome there, and then the state society can again send delegates to the National body, which has finally adopted its views. It would be perfectly absurd to try to punish the New York State Medical Society by continuing the existence of the seceding body, when its action has been at last so thoroughly endorsed. We hope to see but one state society in New York next year.

RECENT REVISION OF THE CODE OF ETHICS.

[*Medical Sentinel*, June, 1903.]

The report of the committee on ethics and its adoption, as modified by the house of delegates of the American Medical Association at New Orleans, marks a distinct step in advance. It carries out into practical ethics the principles, which have been foreshadowed now for three years past in the great movement looking towards the harmonisation and unification of the profession. It could hardly be otherwise; the spirit of revision is in the air, it has already reached the Scriptures, and has extended to that even more impregnable rock of doctrine, the Presbyterian Creed. Unless we wish to be classed with, or even behind theologians, we must submit to the same process. The keynote of the new code is squarely struck in Chapter III., in

the statement that the local societies should consider as eligible to membership "any physician recognised as such by law, and possessing a good personal and professional character, whatever may be his individual views on any questions connected with the science of medicine." This frankly and completely ignores all "pathies," whether socalled "allopaths, homeopaths or hydropaths," and is, in our judgment, the only tenable ultimate position. The sooner local societies come into line with this declaration, the better it will be for the profession, as well as for them personally. There was a time when the physician had practically no protection from either Church or State; when his only means of determining his standards and of maintaining the dignity of the profession lay in his own private organisation or school. Naturally these schools came to be mutually exclusive and intolerant, but the day, happily, has passed; in every civilised community the state now protects the health of its citizens to the extent of declaring that no one shall be permitted to bear the proud title of doctor and practise medicine, who cannot show to a competent examining body that he possesses adequate qualifications for this great responsibility.

When the state has declared a man a physician and fit to be trusted with the responsibility of human life, it is no longer necessary that this judgment should be confirmed by any school of medicine, whether it be the one to which we belong, or any other. That man is a physician in the eye of the law, and responsible to the law for any incompetency or immorality. He is also a physician in the eye of the public, and the old Anglo-Saxon principle that every man shall be deemed innocent until he shall be proven guilty, demands that he should be recognised as such, until by his life and conduct he has shown himself to be unworthy of confidence. The moment that he has done so, then our remedy is clear and should be exercised at once. We should demand the revocation of his certificate by the State Board, and expel him from our societies. With a society based upon this broad ground, expulsion from its ranks would practically mean expulsion from the profession, and would be treated accordingly.

NEW ATTITUDE TOWARD CONSULTATIONS.

This, of course, cuts the Gordian knot of the consultation problem, which has been at the bottom of all the serious divisions in the profession for the last 25 years, notably in the State of New York. And it is time that it was so cut, for in our former attitude upon this subject, while jealously anxious for the standard and honor of our profession, we have been, to my eye, both negligent and almost criminally indifferent to a far more important element, and that is the welfare of the patient. Our former attitude practically amounted to this, that because a man chose to employ as his attendant a member of the profession with whose views upon certain therapeutical or pathologi-

cal questions we were not entirely in harmony, therefore he and his family were to be utterly deprived of our skill and our knowledge, when demanded in consultation, even in the face of death. Of course we had a socalled emergency clause, according to which, to save life, we might soil our precious fingers by contact with an irregular, but this was of little value, and the general public, in my judgment, was perfectly right in regarding our attitude in this respect as both unreasonable and little short of inhuman. The patient has some rights, which even the warring schools of his physicians are bound to respect. It is a good thing that this barrier is down, also for another reason, and that is that while a considerable proportion of our profession unquestionably strictly adhered to its requirements, and thereby frequently deprived innocent women and children of their valued services in critical situations, yet a large minority of the profession, among them many of those who were most vociferous in denouncing the possibility of the admission of the socalled irregulars to membership in our societies, in the intervals between these paroxysms of protest, consulted with them freely and indiscriminately whenever the fee was large enough or the family sufficiently influential. The new departure will not merely form a broader and better protection for the interests of the patient and the best interest of the community, but will also relieve a minority of our members from the stain of insincerity and the painful necessity of hypocrisy. We have now a code so simple that its obligations are capable of prompt recognition by any man whose heart is in the right place, inside or outside of the profession, which is more than could be said before.

Manual of International Classification of Causes of Death.

THE JOURNAL has received from the chief statistician of the American census office a document with the foregoing title. It is accompanied by a number of circulars in pamphlet form, the purpose of these several brochures being to promote a uniformity of registration of vital statistics, "in order to make the census mortality statistics more valuable."

This incident gives us the opportunity to remind our readers that vital statistics are the gold and silver, the coin of the realm of hygiene; that in coins accuracy and purity are of supreme importance, and in vital statistics causes of death must be in terms of exactness; that facts must be stated not only with preciseness, but in terms having exact value. All this is necessary that the mind of the observer who writes the certificate may be plainly understood by the local health officer, by the health officer at the capital of his state, by the government at

Washington, and everywhere over the entire world where use is made of vital statistics.

We wish this manual might find its way into the hands of every man authorised by law to make a death certificate, and we advise that it be studied and consulted by all such to make sure that causes of death shall only be stated in authorised official terms. Our local health officer will find this manual authority for returning many certificates to the writers with the suggestion that the cause of death is too indefinite for the purposes of his office. Town local health officers will find,—and would do well to take advantage of such finding,—in this manual a nomenclature from which they can improve their own publications.

This manual has been adopted by the census office at Washington for the compilation of mortality statistics, beginning with the year 1900. It contains by far the most comprehensive, most complete, and most scientific nosological tables that have yet been published in America. Moreover, it is replete with instructive suggestions, and merits the careful examination, if not study, of every person interested in the preparation of vital statistics.

America is to be congratulated upon this important step for the advancement of state medicine, and we ask in its support the united efforts of the medical profession.

All physicians will rejoice over the success of the Child Labor Committee of New York, in securing the passage of bills by the last legislature regulating the employment of children. The *Buffalo Express* of June 18, gives a summary of the law as follows:

The perjury of parents regarding the age of children under fourteen years old in order to secure employment for them in factories and stores has been made impossible by requiring as evidence of age either a transcript of the child's birth or baptismal certificate, or some other religious record, or its passport; the clause of the old law allowing children twelve to fourteen years old to work in stores during vacation has been repealed for all cities of the first and second class; a nine-hour limit has been placed upon the work of children fourteen to sixteen years old in factories and stores, in place of a ten-hour limit; the employment of messenger, telegraph, delivery and office boys less than fourteen years old has been forbidden, while between the ages of fourteen and sixteen years they may be

employed only nine hours a day and not later than 10 o'clock at night; no boy less than ten years old is allowed to sell newspapers in New York and Buffalo and all boys between the ages of ten and fourteen years must receive licenses or badges and may not work later than 10 o'clock at night; the compulsory school-attendance age has been raised from twelve to fourteen years:

There is no doubt that the interests of health, intelligence and morality among the young are served by these measures, provided the enforcement of the laws can be secured; and to this end funds are solicited which may be sent to the Child Labor Committee, V. Everit Macy, No. 68 Broad Street, New York.

The New York State Nurses's Association has been instrumental in securing the passage of a bill which provides a system of registry for regularly trained nurses who shall have passed a satisfactory examination before a board of examiners appointed by the regents of the University. The association, under the provisions of the bill, is to nominate a list of ten members, from which the examiners are to be selected. Nurses passed by the board each will receive a license as registered nurse, and may attach R. N. to their names, as may also nurses already qualified by long service. The bill became a law April 27, 1903, the day it was signed by Governor Odell.

Dr. John P. Bryson, one of the foremost genitourinary surgeons in this country, died at his home in Saint Louis recently, after a brief illness. Dr. Bryson was graduated from the Humboldt Medical College in 1868, and at the time of his death was genitourinary surgeon in the medical department of Washington University and surgeon to the Saint Louis Mullanphy Hospital. He was a member of the American Association of Genitourinary Surgeons and the Saint Louis Medical Society. He was one of the founders of *American Medicine*.

Dr. Bryson's death will be keenly felt in Saint Louis, where he took an active interest in civic affairs. His chief work as a professional man was in genitourinary surgery, and he ranked high as an operator on the prostate. His writings on this subject and his description of the prostate and its diseases and abnormalities are classics and will long remain unequalled for

lucidity and scientific accuracy. Especially is this so of one of the last papers Dr. Bryson prepared, that which he read before the meeting of the American Association of Genitourinary Surgeons at Atlantic City, in May of last year, on The technic of prostatectomy. In this paper he compared the suprapubic and perineal routes and exhibited specimens, some taken as far back as 1895, to prove his contention that the suprapubic route was the proper method. Another paper, entitled, A possible aid to the discovery of the tubercle bacilli in urine, read in Washington in 1897, remains to this day one of the most important contributions to the subject which has been issued.

PERSONAL.

Dr. G. A. Himmelsbach, of Buffalo, has removed his office and residence from 137 West Tupper Street to his new office and residence at 382 Elmwood Avenue. Telephones: Bell, Bryant 106; Frontier 687. Hours: 8 to 9 a.m.; 2 to 3 and 7 to 8 p.m.

Dr. Harvey R. Gaylord, of Buffalo, who has recently been ill with typhoid fever, has recovered therefrom, and sailed for Europe, June 20, 1903. Dr. Gaylord will occupy a position as complimentary assistant in the surgical clinic of Professor Mikulicz in Breslau, where he will spend at least a year. On his return to Buffalo, he will devote himself to the practice of surgery.

Dr. Montgomery A. Crockett, of Buffalo, has gone to Hamburg, Germany, where he is pursuing the study of general surgery.

Dr. G. H. A. Clowes, of the Gratwick research laboratory, Buffalo, is spending his vacation of three months in Europe.

Dr. Chauncey Pelton Smith, of Buffalo, has removed his office from 90 N. Pearl Street to 481 Franklin Street. Hours: 9 to 10 a.m., 2 to 3 and 8 p.m. Telephone, Tupper 412.

Dr. Frederick Preiss, of Buffalo, sailed for Europe, May 27, 1903, where he will spend some time in medical study in Great Britain and on the continent.

Dr. A. E. Sohmer, formerly of New York, has located at 1343 Jefferson Street, Buffalo. Hours: 8 to 9 a.m., 1 to 3 and 7 to 8 p.m. Telephone: Bell, Bryant 5016; Frontier, 3910.

Dr. Max Keiser, of Buffalo, is spending the summer in Europe. He has lately removed his office from 388 Franklin Street to 888 Main Street.

Dr. E. P. Hussey, of Buffalo, was elected vice-president of the American Institute of Homeopathy during its recent annual meeting at Boston.

Dr. A. L. Benedict, of Buffalo, has gone abroad for a six weeks' vacation.

Dr. Jefferson D. Griffith, of Kansas City, attended the Fourteenth International Medical Congress, recently held at Madrid, as one of the delegates from this country.

Dr. Richard Douglas, of Nashville, whose treatise on Surgical Diseases of the Abdomen has just issued from the press, was one of the delegates to the Fourteenth International Congress, held at Madrid in April, 1903.

Dr. L. H. Dunning, of Indianapolis, was elected chairman of the section on obstetrics and gynecology at the recent annual meeting of the American Medical Association.

Dr. Edwin Walker, of Evansville, Ind., has been appointed chairman of the business committee of the house of delegates, American Medical Association, for the current year.

Dr. John Herr Musser, of Philadelphia, president-elect of the American Medical Association, visited Buffalo, June 16, 1903, at which time he presented the subject of Cancer of the Lungs, before the District Branch of the State Medical Association. A banquet was tendered Dr. Musser in the evening at The Genesee, at which speeches were made by several representative physicians, including the guest of honor.

Dr. James W. Charters, of Buffalo, recently sailed by the Cunard Line for a tour in Europe.

Dr. T. D. Davis, of Pittsburg, was elected first vice-president of the American Academy of Medicine at its recent meeting at Washington.

Dr. Charles McIntire, of Easton, Pa., was again elected secretary of the American Academy of Medicine. At the last meeting he was president, and now goes back to his old place in which he has served so long and so capably.

Dr. Alonzo Garcelon, of Lewiston, Me., formerly governor of the Pine Tree State, may be named with great oppropriateness the Nestor of the American medical profession. Dr. Garcelon attended the recent meeting of the American Medical Association at New Orleans, at which, on May 6, his friends, in celebration of his ninetieth birthday, presented him with a loving cup and cane. The occasion was so rare that it served to add to the interest of the meeting.

Dr. F. Park Lewis, of Buffalo, has been appointed by Governor Odell, chairman of the commission, to investigate the condition of the adult blind in the State of New York.

Dr. Joseph W. Grosvenor was elected president of the Buffalo Academy of Medicine at the annual meeting held June 9, 1903.

OBITUARY.

Dr. Isaac Newton Love, of New York, died June 18, 1903, from apoplexy on the Cunard steamer "Aurania," while she was at quarantine, just before coming up the bay to her pier. Dr. Love was in the saloon of the steamship, speaking of the pleasant trip, when he suddenly fell to the floor. He was immediately carried to his stateroom, where he was attended by the ship's surgeon. He died within ten minutes after he was stricken.

Dr. Love sailed for France about a month ago with a patient, Mrs. George Law. Leaving her there, he started for home, returning by way of England. The voyage across was an unusually pleasant one. Dr. Love, who was a good entertainer, was reported to have been the life of the ship, and helped greatly to make the time pass pleasantly. A committee, of which he was chairman, was selected to prepare and read to

Captain Potter a set of resolutions expressing the pleasure which had been experienced. Dr. Love was speaking informally, after reading the resolutions, when he was stricken. His body was taken to his home, the Nevada apartments, Broadway and Sixty-ninth Street, and the funeral was held from Saint Paul's Methodist Episcopal Church, at Eighty-sixth Street and West End Avenue, Monday afternoon, June 22.

ISAAC NEWTON LOVE—1853-1903.

Dr. Love was born at Barry, Pike County, Ill., September 13, 1853, and was therefore in the fiftieth year of his age at the time of his death. His parents were Isaac N. and Nancy Love. His father having died when he was two years old, and his mother ten years later, he was sent to Saint Louis to live with Dr. John T. Hodgen, a relative, and then the leading surgeon of that city. He began the study of medicine early in life, and received his doctorate degree in 1872 from Saint Louis Medical College. Soon after his graduation, through competitive exam-

ination open to all the graduates of Saint Louis medical schools, he received the appointment of assistant resident physician at the Saint Louis city hospital. Still later, he was appointed city physician in the administration of Mayor James H. Britton, in which office he served one year, after which he engaged in private practice, which continued to occupy his attention until his death.

In 1878, Dr. Love married Florence N., daughter of Judge John F. Williams, of Marshall, Texas. He is survived by his widow and two children, Delphine and Hodgen.

Dr. Love received many appointments to teaching chairs in medical colleges. At first he taught physiology in his *alma mater*, and afterward became demonstrator of anatomy in the same institution. He developed a strong liking for children early in his professional career and, owing to a vacancy in the department of children's diseases in the college, he determined to become a specialist in pediatrics. In this field, perhaps, he achieved his greatest fame. He became professor of clinical medicine and diseases of children in the Marion-Sims College of Medicine in 1890, when that institution was organised. In 1887, he served as secretary of the section on pediatrics in the Ninth International Medical Congress, and in the same year was elected president of the Mississippi Valley Medical Association. In 1889, he was chosen president of the section on diseases of children in the American Medical Association, and also in the same year was elected one of the trustees of that body.

Dr. Love had been a frequent contributor during all these years to the medical periodical press, and was an associate editor of the *Saint Louis Medical Review*. Finally, he determined to establish a journal of his own, and in January, 1890, the first number of the *Medical Mirror* appeared, a magazine that was destined to become famous throughout the land and which he continued to edit and publish until his death. In 1893, he was elected vice-president of the American Medical Association and also served as an officer of the first Pan-American Medical Congress, held at Washington, in September, 1893. About three years ago, in order to broaden his field of labor, he removed to New York City, where he continued in the active practice of his profession until his sudden demise.

Dr. Love was a well-equipped physician both for teaching and practice. His original methods in the lecture room attracted attention early in his professorial career, and his popu-

larity was promptly established with both colleagues and pupils. As a clinician his talents were developed in a remarkable degree, his diagnostic acumen being not second to his therapeutic skill, and his manner in the sick room gained for him the deep attachment of his patients. He was, moreover, a genial companion, a staunch friend, and a broadly cultured man. A raconteur of the first order, he was capable of entertaining on any occasion when wit, story or eloquence, one or all, were called for. His versatility was such that he could easily adapt himself to the grave or gay, though his sunny nature would not brook gravity for very long. He could discuss science, art or literature, in the most entertaining, sober manner; and in another instant provoke his auditors to exceeding mirth by bright saying, witty anecdote, or clever speech; indeed, singularly enough and altogether fitting, it was while exercising these gifts that the messenger came and summoned him to the hereafter. Could he have chosen he would have had it thus.

Dr. Chester Howard, of Dayton, N. Y., University of Buffalo, 1879, died at his home, May 27, 1903, aged 55 years. He had been an invalid for two years or more from an affection of the spine.

Dr. L. H. Kitchel of Alden, N. Y. died April 20, 1903, aged 57 years. He graduated at the University of Buffalo in 1870.

Dr. Jared M. Newell, of Rochester, died April 23, 1903, aged 82 years. He graduated at the University of Buffalo in 1846.

Dr. Alice M. Potter, University of Buffalo, 1897, of Ithaca, died May 2, 1903, of typhoid fever, aged 33 years. It appears that Dr. Potter fell a victim to the epidemic that she sought to stay by her self-sacrificing devotion. Her case was complicated by appendicitis, for which an operation was made. Appropriate action was taken upon her death at a special meeting of the physicians of Ithaca.

Dr. Hubbard A. Foster, of Buffalo, died at his home, No. 3 Saint John's Place, June 16, 1903, aged 55 years. He was born at Adrian, Ohio, and in his youth removed to Rockford, Ill. where his preliminary education was obtained. He volunteered his services during the civil war, enlisting in the 132d Illinois Infantry. Soon after his discharge from the army he located at Buffalo, and received the degree of doctor of medicine from

Harvard Medical School in 1871. Dr. Foster, in 1873, married Florence A. Jenkins, of Bridgewater, Mass. His widow and two children, Florence M. and Henry H., survive. The remains were interred at Clifton Springs, N. Y.

At a meeting of the staff of the homeopathic hospital, of which Dr. Foster had been a member, appropriate resolutions were passed expressing regret at his decease and sympathy with his surviving relatives.

Dr. Thomas McCann, of Pittsburg, died May 9, 1903, after a prolonged illness, aged 40 years. He received his medical degree at Bellevue Hospital Medical College in 1886, after which he served as interne at Bellevue hospital. When his term expired as resident physician he returned to Pittsburg and commenced practice with his father, Dr. James McCann, one of the leading surgeons of that city. The younger McCann developed surgical talent early in his professional career and became one the leaders of that branch in Pittsburg. He was a member of several local societies, and in 1898 was elected Fellow of the American Association of Obstetricians and Gynecologists. He was professor of the practice of surgery and clinical surgery in the Western Pennsylvania Medical College, and consulting surgeon to Saint John's Hospital, Allegheny.

SOCIETY MEETINGS.

The Medical Society of the County of Chautauqua will hold its annual meeting at Chautauqua, N.Y., July 8, 1903, under the direction of and observing a program prepared by Dr. G. E. Blackham, of Dunkirk, N. Y., president of the society. The entire session will be devoted to the subject of tuberculosis under the following titles: Legislation concerning tuberculosis, Hon. Elton D. Warner, late Deputy Attorney General; Value and limitations of tuberculin test in cattle, Hon. Frank E. Shaw of the New York State Tuberculosis Commission; Report of a case of tubercular transmission from bovine to human, Dr. G. E. Smith, Cherry Creek; The etiology, Dr. G. E. Blackham; Bacteriological diagnosis, Dr. A. W. Dods, Fredonia; Treatment, drugs, climate, and the like, Dr. N. G. Richmond, Fredonia; *x*-Ray treatment, Dr. M. Moore, Fredonia. An excursion rate of $1.00 round trip from Buffalo, will make the place cheaply reached and afford

a most delightful trip. The society extends to the profession of Buffalo and surrounding counties a most cordial invitation to be present and take an active part in the discussions.

THE American Electro-therapeutic Association will hold its thirteenth annual meeting at the Windsor Hotel, Atlantic City, Tuesday, Wednesday and Thursday, September 22, 23 and 24, 1903, under the presidency of Dr. Daniel Roberts Brower, Chicago.

THE Fourth Pan-American Medical Congress will be held in Buenos Aires, S. A., in 1905. The international executive committee at its meeting held April 1, 1903, decided to accept this amended date upon the proposal of the members from the Argentine Republic, to avoid a conflict of dates with other national and international associations and congresses.

THE Erie County Medical Association held its quarterly meeting at the University Club, Buffalo, Monday, June 8, 1903, at 8 p. m. under the presidency of Dr. Allen A. Jones.

Program:—The relation of common pelvic diseases to the general health, by Dr. C. C. Frederick. Discussion by Drs. Maud J. Frye, H. E. Hayd and Ray H. Johnson. Differential diagnosis of tumors of the breast, by Dr. E. J. Meyer. Discussion by Drs. Phelps, Kenerson, and Clinton. The relation of the physician to the puerperal woman and her child, by Dr. W. G. Taylor. Discussion by Drs. Huntley, Sherman and Trowbridge. Hemorrhage following tonsillotomy with report of a serious case, by Dr. Adolph H. Urban. Discussion by Drs. Renner, Cott and Meyer.

THE Fourth District Branch of the New York State Medical Association, held its nineteenth annual meeting, at the Buffalo Club, in this city, June 16, 1903.

The following program was observed: President's address, J. W. Morris, Jamestown; Intestinal obstruction, Wm. C. Phelps, Buffalo: discussion: Zera J. Lusk. Spurious gastric symptoms, Allen A. Jones, Buffalo; discussion: John G. Kelly. The radical operation for chronic suppurative otitis, Arthur B. Duel, New York; discussion: W. Scott Renner. Results obtained by prostatectomy, Parker Syms, New York; discussion: Wm. C. Phelps. The obstetric significance of retroversion and retroflexion of the uterus, Samuel M. Brickner, New York; discussion: C. C. Fred-

erick. Hints on the hygiene and dietetics of children, H. F. Gillette, Cuba; discussion: Dewitt H. Sherman. Pseudomyelitis, Chas. R. Phillips, Hornellsville; discussion: Chas. A. Wall. A paper on smallpox, Wm. A. Macpherson, Leroy; discussion: Geo. A. Himmelsbach. Ocular incoordination and cerebral reflexes, F. Park Lewis, Buffalo; discussion: A. A. Hubbell.

Dr. John Herr Musser, of Philadelphia, president-elect of the American Medical Association, presented a paper on Cancer of the lungs.

The Buffalo Academy of Medicine held its annual meeting Tuesday evening, June 9, 1903. Program: Election of officers; an address by the retiring president, Dr. Herman E. Hayd. Installation of newly elected officers.

The American Association of Obstetricians and Gynecologists will hold its sixteenth annual meeting at Chicago, Tuesday, Wednesday and Thursday, September 22, 23 and 24, 1903, under the following administration: president, Lehman H. Dunning, Indianapolis; vice-president, Marcus Rosenwasser, Cleveland, and Herman E. Hayd, Buffalo; secretary, William Warren Potter, Buffalo; treasurer, Xavier O. Werder, Pittsburg; executive council, Edward J. Ill, William A. Humiston, Edwin Ricketts, Walter B. Chase, Albert Vander Veer and Lewis S. McMurtry. The preliminary program is in process of preparation to be sent out July 15, and it is desirable that the titles of papers to be read should be furnished the secretary promptly, in order to be included.

Dr. John B. Murphy, of Chicago, is the chairman of the committee of arrangements and will supply any information with reference to the local features of the meeting upon request.

HOSPITAL NOTE.

The Buffalo General Hospital will become the recipient of a legacy of $100,000 by the will of Mrs. Agnes Ethel Tracy, which was probated at New York, June 2, 1903.

By the fourth article Mrs. Tracy exercises a power of appointment given her under the will of her husband, Francis W. Tracy, respecting a fund of $100,000 in which Harriet Tracy, Mr.

Tracy's daughter by his first wife, has a life estate. This fund Mrs. Tracy directs be paid to the Buffalo General Hospital at the daughter's decease. She expresses the wish that it be in the nature of a memorial of her husband and his father, Albert H. Tracy, to perpetuate their memory in Buffalo.

BOOK REVIEWS.

THE INTERNAL SECRETIONS AND THE PRINCIPLES OF MEDICINE. By CHARLES E. DE M. SAJOUS, M. D., Fellow of the College of Physicians of Philadelphia; formerly Lecturer on Laryngology in Jefferson Medical College, and Professor of Laryngology and Dean of the Faculty in the Medico-Chirurgical College. Volume First. Octavo, pp. 826. With 42 illustrations. Philadelphia: F. A. Davis Co. 1903.

This work will attract attention from the somewhat startling nature of its claims, yet gradually many of its assertions have already been admitted as among the tenable truths of science. The physiology of the adrenals, with which the first chapter is concerned, is viewed from the standpoint of clinical pathology. To determine the relative functional importance of the suprarenal glands in man and the lower animals is an essential point to settle, yet it is a field of study, beset with obstacles. Sajous has made this question one of great study, but thus far has not reached absolute definiteness as to all the points involved. He, however, affirms that "the physiological functions of the adrenals are sufficiently similar in all vertebrates to warrant the use of experimental data obtained with lower animals in the study of these organs in man." There are many points of great interest connected with the study of the adrenals that we must pass without even commenting upon.

The thyroid and thymus glands and the adrenals considered in their relationship, presents another question of interest, and one that furnishes opportunity for much speculation. It has been the accepted opinion for some time that myxedema and cretinism are due to insufficiency of secretion of the thyroid gland, and Sajous concludes that these two diseases are due to insufficiency of the adrenals, primarily, which causes diminution or absence of secretion in the thyroid.

After discussing the relations of the anterior pituitary body, the thyroid gland, and the adrenals, as parts of an autonimous system, the author takes us to the pathogenesis of acromegaly, of which he distinguishes three forms,—one due to overnutrition of predisposed pituitary through continuous overactivity of the adrenals and maintained by chronic toxemia; a second, due to persistence of the thymus, brought on by overstimulation of the adrenals; and a third, due to morbid processes, such as tumors and the like, in the pituitary itself. On page 234, a

singular error has crept into the text by omission of the words "the temperature" (of a dog, etc.), and again a little farther on, "when the muscles contraction as follows," is an imperfect sentence that indicates another omission. These, of course, will be corrected in the next edition.

The oxidising substance is discussed in much detail and is considered very fully as subserving the physiological needs of the functions of the stomach, liver, heart, lungs, intestinal tract; in short all the organs concerned in air or food nutrition. Perhaps, if the part played by the adrenals in the nourishment and waste—in the metabolism—of the body, as conceived by the author, becomes established, there will be more precision in the therapeutics of nutrition, indigestion, and the wasting diseases. Sajous becomes very interesting—intensely so, we may say—when he presents the relation the adrenal secretion bears to the heart, and discourses upon the sources of the heart's energy. This is a field too little understood because too little explored. These are strenuous days and the heart feels the strain intensely, often giving out before it should or would if its energy were properly conserved. Carrying the subject forward through the nerve centers, the author offers many thoughts of interest because of their important bearing on the preservation of health and longevity. Their very novelty will attract and if their practical establishment shall finally take place, a valuable addition to the science of medicine will have been made.

The means offered by nature to protect herself are many, but of them all the immunising processes through which the body is protected against infection are, perhaps, the most remarkable. Sajous takes this up in a discussion of the relations of the adrenal system to antitoxic serum, and explains how poisons are converted into harmless substances through the agency of the adrenals. In the course of this investigation the leukocyte in its relations to life and organic functions plays an important part. Just now the subject of leukocytosis is being discussed in almost every medical and surgical phase, and it is quite germane to the question that Sajous has written in this treatise so much of value. That the leukocyte is an important factor in immunity is more than probable.

It would be interesting to pursue this entire field in detail, but we are reminded of the fact that a review must be compact, not diffuse, in order to command even moderate attention. The functions of the ductless glands as oxygen producing or supplying agents is important and, if completely and wholly true, makes the more important organs take secondary place, to work out their destiny at the behest and under the mandatory influence of these hitherto little understood almost insignificant bodies.

The entire volume betrays a patient study and a tireless energy that are pleasant to contemplate. It is withal, a

fascinating book that will assuredly attract attention in the laboratory and in the clinic. It invites the investigator of cause to prove or disprove its statements, its inferences, or its asserted facts. It beckons onward into a mazy labyrinth of unexplored or but partially explored physiologic and pathologic jungles, where a reward awaits that shall amply repay the student for his work. The artistic illustrations deserve, in conclusion, a word of praise. They are much above the average in delineating the text and in perfection of color, tint, and execution.

HARRINGTON'S HYGIENE. A Manual of Practical Hygiene for Students, Physicians and Health Officers. By CHARLES HARRINGTON, M. D., Assistant Professor of Hygiene in the Medical School of Harvard University. New (2d) edition, revised and enlarged. In one octavo volume of 755 pages, illustrated with 113 engravings and 12 full-page plates in colors and monochrome. Philadelphia and New York. Lea Brothers & Co. 1903. [Cloth, $4.25 net.]

The prime object of the author of this work was to create a textbook for students and it was our privilege as well as pleasure more than a year ago (November, 1901, p. 312), upon or soon after the first edition appeared, to invite attention to the success which he had attained in this respect. In the interval there has been much progress in the field of hygiene, but Harrington has kept pace with it, and in this new edition has recorded many facts not contained in the first.

The changes in this issue have required additions to the extent of seventy pages, and a substraction or elimination of some thirty pages, leaving a net gain of about forty pages, though there is no apparent increase in the size of the book. While many chapters have been in part rewritten, the chief addition results from a new chapter dealing with the relation of insects to human diseases. This subject though not entirely new has received only recently that scrutiny which its importance requires. It was not until bacteriology threw light on the methods of infection carriers, that the rôle played by insects came even to be suspected. Harrington's chapter deals so intelligently with this whole question that we had almost pronounced it the best exposition of it, in condensed form, that has yet appeared. The eight or nine illustrations in this chapter are helpful in a marked degree to the study of the mosquito, especially to a differentiation of the species.

The pages eliminated related chiefly to quarantine law and some other obsolete material, but many other changes permeate the treatise, making it quite abreast of the immediate present in all particulars.

We observe, on page 597, that credit is given "Dr. P. C. Harris, U.S.A.," for a plan of a sanitary camp. Captain P. C. Harris, Q.M., U.S. Army, then stationed at Fort Porter, prepared a plan of such a camp and demonstrated it at a meeting of the Buffalo Sanatory Club, December 14, 1898. This was

published in the BUFFALO MEDICAL JOURNAL, February, 1899, which is the proper reference to Capt. Harris's drawing, one that is quite original and the most complete of its kind.

All through Harrington's treatise the genius of hygiene pervades, and it gives equal scientific thought whether dealing with foods, school sanitation, or personal hygiene; whether handling the most complex problems of public sanitary science, or those relating to the personal health of the individual. For these and other reasons it may be regarded as quite one of the best expositions of hygiene in its broadest application, that has been published.

SAUNDERS'S MEDICAL HAND-ATLASES:

ATLAS AND EPITOME OF HUMAN HISTOLOGY AND MICROSCOPIC ANATOMY. By PRIVATDOCENT DR. J. SOBOTTA, of Wurzburg. Edited, with additions, by G. Carl Huber, M. D., Junior Professor of Anatomy and Histology, and Director of the Histological Laboratory, University of Michigan, Ann Arbor. With 214 colored figures on 80 plates, 68 text-illustrations, and 248 pages of text. Philadelphia and London. W. B. Saunders & Co. 1903. [Cloth, $4.50 net.]

As one follows out the list of medical hand-atlases published in this country by Saunders, one naturally wonders if there is any limit to the work. The latest of the books issued, admirably illustrates the fact that there is no subject which cannot be improved upon in some way or another when handled by a master.

There are so many works of histology that it was something of a daring venture to present a small volume on the subject; but in this work of Sobotta's, which is edited by Dr. G. Carl Huber, director of the histologic laboratory of the University of Michigan, the excellent text and the well-chosen illustrations make the volume typic of its general title; it is both a handbook and an atlas. The illustrations are especially well done, which is all the more remarkable when one considers the exquisite colorings and anatomic corrections of previous issues of this series.

There are 80 lithographic plates and between 60 and 70 plates made by photomechanic methods. It will be interesting to quote from the editor's preface concerning the method adopted to secure original illustration:

> The preparations were photographed under the same magnification as that under which they were drawn. The photographs were then used as a basis for the drawings, in that outline drawings, even to the finest detail, were traced on tracing paper; these outline drawings were then transferred to drawing paper. This method assures an exactness of magnification; by means of it distortion is avoided, and during the preparation of the drawing the photograph serves as a control picture.

It does not need a reviewer's say-so to make apparent the excellence and accuracy of this method. Additional value is lent to the work and especially the illustrations by the fact that all were made from sections of human tissue, obtained from the

bodies of executed criminals within a few hours after death, making the specimens fresh and normal in every respect.

N.W.W.

Saunders's Medical Hand-Atlases:

Atlas and Epitome of Diseases of the Mouth, Pharynx and Nose. By Dr. L. Grunwald, of Munich. From the second revised and enlarged German edition. Edited, with additions, by James E. Newcomb, M. D., Instructor in Laryngology, Cornell University Medical School; Attending Laryngologist to the Roosevelt Hospital, Out-Patient Department. With 102 illustrations on 42 colored lithographic plates, 41 text-cuts and 219 pages of text. Philadelphia and London: W. B. Saunders & Co. 1903. [Cloth, $3.00 net.]

The value of this volume of the medical hand-atlas series is best indicated by the fact that a second edition has been found necessary, the first having been exhausted almost as soon as issued. In the second edition the author and editor have revised and enlarged the book, and it now stands unequalled as one of the most perfect and valuable of the smaller works on the diseases of the mouth, pharynx and nose. Dr. Newcomb has added to the volume notes which represent the distinctively American views of the topics discussed by the author and these notes have added materially to the value of the work as an American publication. It now gives the best there is at the command of the famous German author, as well as the best there is in American ideas concerning the specialty treated of.

Much time and space have been devoted to the consideration of pathologic conditions and some of the common and yet very important operations have been described in detail, with a view to making their understanding perfectly clear. There is an enlargement of the illustrative feature of this edition, and there has been added a series of complete case histories which make a complete and very valuable section of the hand-atlas series.

N. W. W.

A Textbook of Pathology and Pathological Anatomy. By Dr. Hans Schmaus, Extraordinary Professor and First Assistant in the Pathological Institute, Munich. Translated from the sixth German edition by A. E. Thayer, M. D., Instructor in Pathology in Cornell University Medical College, New York. Edited with additions by James Ewing, M. D., Professor of Pathology in Cornell University Medical College, New York. Octavo, pp. 614. Illustrated with 351 engravings, including 35 colored insert plates. Lea Brothers & Co., Philadelphia and New York. 1902. (Cloth, $4.00 net.)

The reputation of Professor Schmaus of Munich, as a pathologist and as a teacher of pathological anatomy, is so great that his work on pathology easily earned recognition, and soon won the foremost place in Germany. The reason for its great popularity, six editions in the original, having already been demanded, is easily discernable on examination of the book. It is so well adapted to the needs of the student and practitioner that an English translation was demanded and Professor Ewing, whose work

on the blood is so well known, was chosen to edit the American edition.

The author divides his work into two parts: Part I. being devoted to general pathology, and Part II. to special pathology. The usual processes as the degenerations, the infiltrations, disorders of circulation, inflammations, deformities and the parasites are minutely described in part one.

The special pathology of the various organs of the body are carefully treated, and especial attention given to the diseases of the brain and spinal cord. These chapters are, perhaps, the best in the book and are beautifully and elaborately illustrated. The color plates are many and convey to the eye what the text so well portrays. These plates are important also, because they show the characteristic staining of the different methods. Particularly good is the colored plate illustrating syringomyelia and hydromyelia; the one stained with ammonia carmine, the other with Weigert's stain. The translation has been rendered in a graceful, easy style.

W. C. K.

Surgical Anatomy. A Treatise on Human Anatomy in its Application to the Practice of Medicine and Surgery. By John B. Deaver, M. D., Surgeon-in-Chief to the German Hospital, Philadelphia. In three volumes. Illustrated by 499 plates, nearly all drawn for this work from original dissections. Volume III. Abdomen; pelvic cavity; lymphatics of the abdomen and pelvis; thorax; lower extremity. Philadelphia: P. Blakiston's Son & Co. 1903. (Price: cloth, $21.00; full sheep, $24.00; half Russia, gilt, marbled edges, $27.00 net.)

The American medical profession is under great obligations to Professor Deaver for the most comprehensive and best surgical anatomy that has been published as yet,—indeed, we might include the profession of medicine throughout the civilised world in this statement. At all events, we are quite sure that all scientific physicians, teachers, and students everywhere will unite in thanking Dr. Deaver for his painstaking and valuable work.

The author offers an apology for the delay of this volume, and proceeds to give some of the reasons that caused it, but he need not feel disturbed over the length of time that has been required to prepare the book. It is an old maxim that "a work done well is done soon enough," and in this instance it seems to have special application. The only wonder is that such a work, involving such an outlay of time, such painstaking dissections, and such minutæ in engraving, could be completed even so soon. The viscera of the cavities are so difficult to obtain in suitable forms for the artist that, of necessity, many cadavers must be examined, not a few of which had to be discarded.

In spite of all the difficulties in the way, the work is now complete in its three volumes, and is a monument not only to the author but to American anatomical science that must last through ages of time. Whenever and wherever anatomical studies, es-

pecially in relation to surgery are wanted, Deaver's work will be examined and be praised for its accuracy, artistic excellence and comprehensiveness of detail.

A Textbook of Histology. By Dr. Ladislaus Szymonowicz. Professor of Histology and Embryology in the University of Lemberg. Translated by John B. MacCallum, M. D., Johns Hopkins Medical School, Baltimore. Octavo, 437 pages, 277 illustrations, including 57 full-page plates in colors and monochrome. Lea Brothers & Co., Philadelphia and New York. 1902. (Cloth, $4.75 net.)

The practical importance of good works on histology, which after all is the basis of medicine and surgery, is paramount and every new work, even though it adds but very little to our knowledge of the subject, deserves attention. Many of the best works on the subject during the past few years have emanated from German sources and their translation into English has been most welcome by American readers. One of the latest works to receive such honor is Szymonowicz's histology. A work in every way entitled to the careful study and consideration.

The author divides the work as usual into two parts: Part I. treating of the microscopic anatomy of cells and tissues, and Part II. to the microscopic anatomy of the organs.

The description of the cell is carefully considered, the process of amitosis, and that of mitosis receiving considerable attention. The chapters following on the tissues—connective, nerve, muscle, bone, blood and lymph--are well written and adopted to the needs of the student of medicine.

In Part II., the different organs of the body are minutely described, and their development traced through the various stages. The illustrations accompanying the chapters on bone, muscle, skin are handsomely executed and deserve great praise. In fact, the publishers have been very liberal in the use of color illustrations and almost every chapter in Part II. has received some recognition along this line.

The book on the whole is unusually well adapted for class room purposes and for clearness of style; originality in presenting facts it stands unrivalled.

W. C. K.

Diseases of the Stomach. A Textbook for Practitioners and Students. By Max Einhorn, M. D., Professor of Clinical Medicine at the New York Post-Graduate Medical School and Hospital; Visiting Physician to the German Dispensary. Octavo, pp. 551. Third revised edition. Illustrated. New York; William Wood & Co. 1903. [Price, $3.50.]

The first edition of this work appeared about seven years ago. In the Journal for April, 1897, p. 718, we presented a comprehensive review of the treatise, in which we referred to the work relating to diseases of the stomach which Drs. Charles

G. Stockton and Allen A. Jones, of Buffalo, were doing. At that time the literature of the subject was beginning to increase in quantity and quality, thanks not only to Stockton and Jones, but to Kinnicut, Stewart, Hemmeter, and Einhorn in this country, and to Laube, Boas, Ewald and others in Germany.

Since we wrote at the time above mentioned there has been greater progress than ever before in this branch of medicine, and much credit therefore continues to attach to the names already mentioned, as well as to some others not here recorded. This edition has been revised in all essential particulars to bring it abreast of the immediate present, and some additions to the text on this account have been required. But it is to all appearance the same book in style, size and general make-up. Einhorn is one of the foremost men in this field, and his book is in the forefront of the science, giving, as it does, all the essentials pertaining to diseases of the stomach, according to present knowledge of the subject. We have not thought it incumbent again to review the work in detail.

THE SURGICAL DISEASES OF THE GENITOURINARY ORGANS. By E. L. KEYES, A. M., M. D., LL. D., Consulting Surgeon to the Bellevue, and the Skin and Cancer Hospitals; Surgeon to St. Elizabeth Hospital, New York. And E. L. Keyes, Jr., A. B., M. D. Ph. D., Lecturer on Genitourinary Surgery, New York Polyclinic Medical School and Hospital; Surgeon to the Out-Patient Department, St. Vincent's Hospital. A revision of Van Buren and Keyes's Textbook. Octavo, pp. 843. With 174 illustrations in the text and 10 plates, 8 of which are colored. New York and London: D. Appleton & Co. 1903. [Price, $5.00.]

This treatise is a valuable addition to the works on this subject. It has been the evident aim of the authors to elucidate fully the clinico-surgical aspects of their subject. Full details are given for the use and management of every instrument and procedure necessary for the practice of genitourinary surgery. In the elimination of syphilis and the sexual psychoses from their work the authors have succeeded in presenting a model textbook on genitourinary diseases without treading on the realms of the venereal specialist.

The views of the authors are clear, concise, conservative and logical. Every side of this branch of surgery is carefully and intelligently dealt with, and each chapter contains opinions and suggestions of such a practical nature that they are sure to be of benefit to the reader. The illustrations and text are excellent, the general arrangement of the subject matter being in logical order. H.R.G.

THE INTERNATIONAL MEDICAL ANNUAL. A yearbook of Treatment and Practitioner's Index. Thirty-four contributors, American and Foreign. Twenty-first year. Octavo, pp. 750. New York and Chicago: E. B. Treat & Co. 1903. [Price, $3.00.]

It speaks well for this annual digest of medical science that it has now reached its twenty-first year. Few books of any kind

stand the severe test of time. It was Emerson's rule to read no book that was not a year old, for, said he, at the end of that time nine-tenths of the books are dead. The original style of the volume has not been changed from the beginning. This is well, for it gives a uniformity to the appearance the group presents in the library, which is pleasing to the eye. Moreover, the general make-up of the book was so well chosen in the beginning, that very little improvement could be made.

The contents of this number is of more than usual interest. It is replete with the most modern methods of treatment in the diseases met with in everyday practice, hence will be found a valuable reference book by every physician engaged in the general practice of medicine. Besides, there are many subjects included that will interest the specialist, hence to him also it becomes a work of importance. The illustrations are many and well executed, which contributes to the usefulness of a book that is the peer of its class.

CLINICAL TREATISES ON THE PATHOLOGY AND THERAPY OF DISORDERS OF METABOLISM AND NUTRITION. By PROF. DR. CARL VON NOORDEN, Physician-in-Chief to the City Hospital, Frankfurt a. M. Authorised American edition, translated under the direction of Boardman Reed, M. D., Professor of Diseases of the Gastrointestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College; Physician to the Samaritan Hospital, Philadelphia. Part III. Membranous Catarrh of the Intestines. By PROF. DR. CARL VON NOORDEN. With the collaboration of Dr. Carl Dapper. Duodecimo, pp. 64. New York: E. B. Treat & Co. 1903. [Price, 50 cents.]

This monograph deals with a disease of much importance, one, indeed, that occurs with sufficient frequency to make it of interest to the practising physician. It ought to be recognised without difficulty, the chief symptoms being the presence of mucus in the stools and pain. The treatment is excellently set forth—rest, hot applications, sedatives, oil by the mouth or in clysters, massage in the interval, and attention to diet. The book is well worth a careful study.

THE PRACTICAL MEDICINE SERIES OF YEAR BOOKS. Comprising ten volumes on the year's progress in Medicine and Surgery. Issued monthly under the general editorial charge of GUSTAVUS P. HEAD, M. D., Professor of Laryngology and Rhinology in the Chicago Post-Graduate Medical School. Volume IV. Gynecology. Edited by Emilius C. Dudley, A. M., M. D., Professor of Gynecology, Northwestern University Medical School. Chicago, and William Healy, A. B., M. D., Instructor in Gynecology, Northwestern University Medical School, Chicago: The Year Book Publishers. 1903. [Price, $1.25; entire series, $7.50.]

This volume, as announced by the editors, is a résumé of the literature of gynecology for the year ending February 1, 1903. The aim has been to choose only the best practical articles, such as are adapted in particular to those physicians who, besides other work, may have frequent occasion to treat the diseases peculiar to women. How well the work has been done may be

determined only by a careful examination of the book. This, if we mistake not, will result in a unanimous finding, that it is altogether the best annual digest of gynecological literature that has been published up to the present time.

The sections on gynecologic examination and treatment, as a matter of course, will attract the attention of a large number of readers, and from them much may be learned that is of great practical value. We, however, would invite attentive observation to the description and illustrations concerning E. C. Dudley's operation for cystocele; also, to the plates and explanatory text relating to the technic of vaginal hysterectomy by the same author. While the book is full of interest, these two subjects in particular are of special concern, being elaborated in much detail and unusually well illustrated.

BOOKS RECEIVED.

A System of Physiologic Therapeutics. A Practical Exposition of the Methods, other than Drug-giving, useful for the Prevention of Disease and in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D. Senior Assistant Professor of Clinical Medicine in Jefferson Medical College. Volume X. Pneumotherapy, including Aerotherapy and inhalation Methods and Therapy, by Paul Louis Tissier, Chief of Clinic in the Faculty of Medicine of the University of Paris. Octavo, pp. 494. Illustrated. Philadelphia: P. Blakiston's Son & Co. 1903. *(Price for the set, $27.50 net.)*

Progressive Medicine. Fifth Annual Series. Volume II., June, 1903. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 427 pages, with 46 illustrations. Lea Brothers & Co., Philadelphia and New York. *(Per volume, $2.50, by express prepaid. Per annum, in four cloth-bound volumes, $10.00.)*

Disease of the Pancreas. Its Cause and Nature. By Eugene L. Opie, M.D., Associate in Pathology in the Johns Hopkins University; Fellow of the Rockefeller Institute of Medical Research. Octavo, pp. 359. Illustrated. Philadelphia and London: J. B. Lippincott Company. 1903. *(Price, $3.00.)*

A Manual of Refraction and Motility. For Students and Practitioners of Medicine. By William Norwood Suter, M. D., Assistant Surgeon to the Episcopal Eye, Ear and Throat Hospital, Washington, D. C. 12mo, 382 pages, with 101 engravings and 4 colored plates. Lea Brothers & Co., Philadelphia and New York. 1903. *(Cloth, $2.00 net.)*

Lea's Series of Pocket Textbooks. A Manual of Bacteriology for Students and Physicians. By Fred. C. Zapffe, M. D., Professor of Pathology and Bacteriology in the Illinois Medical College; Professor of Histology in the Department of Medicine and in the School of Dentistry of the University of Illinois, Chicago. 12mo, 350 pages, with 150 engravings and 7 full-page colored plates. Series edited by Bern B. Gallaudet, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, Columbia University, New York. Lea Brothers & Co., Philadelphia and New York, 1903. (Price, cloth, $1.50 net; flexible leather, $2.00 net.)

A Textbook of Chemistry for Students of Medicine, Pharmacy and Dentistry. By Edward Curtis Hill, M. S., M. D. Medical Analyst and

Microscopist; Professor of Chemistry and Metallurgy in the Colorado College of Dental Surgery; Professor of Chemistry and Toxicology in Denver and Gross College of Medicine, University of Denver. With 78 illustrations, including 9 full-page half-tone colored plates. Pages XII-523 crown octavo. Philadelphia, F. A. Davis Company, 1903. (Extra cloth, $3.00 net delivered.)

Sexual Impulse in Women. Third Volume in Series. Studies in the Psychology of Sex. By Havelock Ellis, L. S. A. (England), General Editor of the Contemporary Science series since 1899. Sold only to physicians, lawyers, clergymen, advanced teachers, and scientists. Philadelphia. F. A. Davis Company, 1903. (Cloth, $2.00 net, delivered.)

Surgical Asepsis. Especially adapted to operations in the home of the patient. By Henry B. Palmer, M. D., Consulting Surgeon to the Central Maine General Hospital. Ninety illustrations. Page VI-231. Large 12mo. Philadelphia, F. A. Davis Company, 1903. (Price $1.25 net, delivered.)

The Expectant Mother. A treatise on the care of the expectant mother during pregnancy and child-birth and the care of the child from birth to puberty. By W. Lewis Howe, M. D. Pages VIII-63. Small 12mo. F. A. Davis Company, Philadelphia, 1903. ($.50 net, delivered.)

A Textbook of Minor Surgery, including Bandaging. By Newman T. B. Nobles, M. D., Professor of Surgery at the Cleveland Homeopathic Medical College. 325 pages. Boericke & Tafel, Philadelphia, 1903. (Cloth, $2.50; Postage, 15 cents.)

The Practical Application of the Roentgen Rays in Therapeutics and Diagnosis. By William Allen Pusey, A. M., M. D., Professor of Dermatology in the University of Illinois; and Eugene W. Caldwell, B. S., Director of the Edward N. Gibbs *x*-Ray Memorial Laboratory of the University and Bellevue Hospital Medical College, New York. Handsome octavo volume of 591 pages, with 180 illustrations, nearly all clinical. W. B. Saunders & Co., 1903. (Cloth, $4.50 net; Sheep or Half Morocco, $5.50 net.)

A Textbook of Modern Materia Medica and Therapeutics. By A. A. Stevens, A. M., M. D., Lecturer on Physical Diagnosis in the University of Pennsylvania; Physician to the Episcopal and St. Agnes Hospitals, Philadelphia. Third edition, greatly enlarged, rewritten, and reset. Handsome octavo of 663 pages. W. B. Saunders & Company, 1903. (Cloth, $3.50 net.)

Transactions of the American Roentgen Ray Society. Third annual meeting held at Chicago, Ill., December 10 and 11, 1903. James B. Bullitt, M. D., Secretary. (Price, cloth $1.25; paper, 75 cents.)

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LITERARY NOTES.

The Batavia Woman's Hospital Association, the corporate body under the auspices of which the Batavia hospital is managed, has issued its first report which embraces the period from May, 1900, to July 15, 1902. The report shows in detail the splendid work that has been done in establishing one of the finest small hospitals in Western New York, which is a credit to every person who has contributed time, material, or money toward its completion and maintenance.

Battle & Company, of Saint Louis, have issued chart No. 2, illustrating fractures of long bones. This is the last of the series and presents Colles's fracture—fracture of the lower end of the radius—in a graphic manner. The contraction of the supinator longus acts to tilt the fracture against and thus displace the lower end of the ulna. This could have been made a more prominent feature of the drawing; nevertheless, it is an instructive delineation of this classic injury.

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